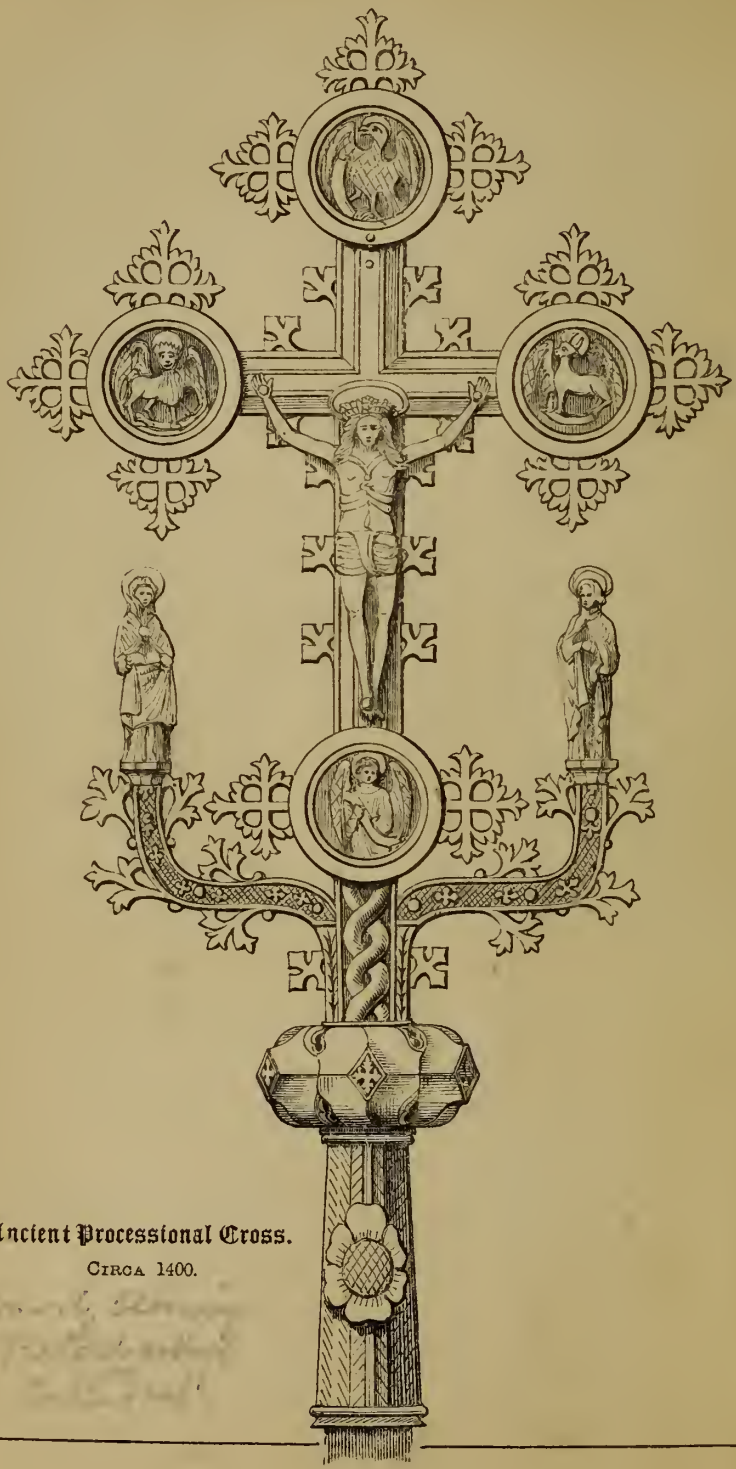

Ancient Processional Cross.

Circa 1400.

A MANUAL

OF

GOTHIC ARCHITECTURE.

BY

F. A. PALEY, M.A.

AUTHOR OF

"A MANUAL OF GOTHIC MOULDINGS," &c.

WITH NEARLY SEVENTY ILLUSTRATIONS.

LONDON:

JOHN VAN VOORST, PATERNOSTER ROW.

M.DCCC.XLVI.

LONDON:
Printed by S. & J. Bentley, Wilson, and Fley,
Bangor House, Shoe Lane.

TO

GEORGE GOLDIE,

OF YORK, ESQ., M.D.

THIS VOLUME IS INSCRIBED

BY

THE AUTHOR.

MAGISTER NICHOLAUS DE GORRANIS CANONICUS ECCLESIE SANCTI PAULI LONDONIENSIS

PREFACE.

THE present little volume is designed rather to assist the student in the distinction, classification, and analysis of architectural details, than to supply new information, or to originate any new method of treating the subject. So much indeed has been already written, and so well, on Gothic Architecture, and the general amount of knowledge possessed by ordinary observers is, in consequence, so much greater and more accurate than it was before the publication of several recent works, that the Public are perhaps justified in expecting that a new Treatise should take a deeper and more systematic view of the subject, than the merely popular books on Architecture have as yet exhibited. But neither depth nor speculative theory is adapted to the taste of those who desire to learn *a little* about Ecclesiastical Antiquities; so that an Author who writes principally for these, however commonplace his remarks will now appear to the more advanced, must pretend to little more than to

say in other words, and to set forth by other illustrations, what has already been said and represented in many different ways.

In truth it is quite impossible to treat of so vast and so indefinite a subject as "Ecclesiology," within the limits of a small duodecimo volume, unless by touching cursorily on the principal heads and departments of that science. Hence, while Mr. Bloxam's excellent work is entirely occupied by describing the styles, each in a separate chapter, in this book the three Gothic styles and their subdivisions are discussed in a single one; for their importance as a branch of the science did not appear to the Author to require more. Besides, it is a very mistaken view to regard what was in reality a progressive and continuous art, as something separable by gaps and intervals into distinct eras. We should rather go with the flow of time, and speak of Gothic details as we find them in each age, pointing out their intimate connexion with what has gone before, and exhibiting their development simultaneously with the *causes* of their change.

The wood-cuts which decorate this volume are from the graver of that justly celebrated artist, Mr. Thurston Thompson, of London. The drawings on the wood were made by the Messrs. Brandon, Architects, whose invaluable work, "The Analysis of Gothic Architecture," is, or ought to be, known

to all who desire an accurate knowledge of the formation of Gothic details. These Gentlemen have kindly allowed the Author the use of several of their original drawings.

The Frontispiece is an accurate representation of a very beautiful ancient Processional Cross, now in the possession of a Catholic gentleman in Lancashire. It has never before been engraved; and as it is probably one of the finest existing in this country, its great interest will be readily acknowledged by all admirers of ancient art.

The concluding chapter on Monumental Brasses, which forms a complete treatise on this department of Ecclesiology, is from the pen of C. R. Manning, Esq. of Benet College, Cambridge, the author of "A List of the Monumental Brasses remaining in England," who has favoured the work with this valuable and original contribution.

It is right to add, that the first part of this work was written and printed a year ago, much delay having been experienced in procuring the wood-cuts. It is possible that, at the present time, the Author would have modified some expressions, which may seem to exhibit undue warmth or unnecessary enthusiasm. It is difficult, while writing under the influence of earnest feelings, to weigh every word, and check every strong expression; while, on the other hand, it is both heartless and insincere to affect the in-

difference of a mere antiquary, in treating of the splendid results of the Religion of the Middle Ages. Without wishing to exhibit an exaggerated parallelism between the skill and the faith of the churchmen of old, the Author confesses his inability to treat such a subject with the cold scientific apathy which distinguishes modern treatises on Church Architecture.

Above all, we are all but too ready to disparage unjustly the works of modern architects, who more frequently want the means than the power to produce Gothic works equal to those of antiquity. It is next to impossible to judge of modern designs with strict impartiality; and critics are seldom fully aware, or disposed to admit, how much their judgement is warped and biassed by that utterly false and unjust notion, that every medieval work is good, and every modern imitative design is a failure.

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A

MANUAL

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CHAPTER I.

INTRODUCTORY.

The style of Architecture commonly called Gothic is that which was developed, by a remarkable change of elemental forms and principles, out of the Romanesque, or debased Classical, by the Western or Latin Church during the middle ages, that is, from about the year A.D. 1150 to 1550. This includes the whole period from its nascent or transitional state to its final decline.

We say that the Gothic or Pointed Style arose from the Romanesque, or rather through the Romanesque, ultimately from the pure Temple Architecture of Greece and Rome.* This state-

* Whewell's "Architectural Notes," p. 29, ed. 3.

ment is not the less true, because the utmost difference, and even contrariety, of principles characterise the works of the ancient heathen and the later Christian Architects. In no civilized nation has any peculiar architectural style started into immediate and independent existence. The history of the art shows that in every instance, except that of the isolated savage tribe, certain forms and features have been borrowed or modified from an antecedent style or prototype, and that every local variety, though influenced by circumstances of climate, habit, and material, has been founded on some existing basis. In a word, all Architecture is in its nature more or less generic, progressive, and imitative.* It may be derived, imported, or innovated; but no complete style was ever suddenly invented. One stock throws out various offshoots, which take root in congenial soils, and spread, and themselves become independent growths, eventually casting off their connexion with the parent stem, and perhaps losing all resemblance to it in distance of time and fulness of development. Hence all structures designed in after ages for the purposes of the Christian religion must be in some degree referable to those in use at the period when that religion was promulgated, however different and opposite may be the two ex-

* Bardwell's "Temples, ancient and modern," p. 161.

tremes presented by the original exemplar, and the style descended from it after the lapse of fifteen hundred years.

Now Rome having been from the first the centre of Christianity, the buildings of that city naturally furnished the earliest models for Christian churches. And accordingly it is from these that our noble medieval edifices trace their remote but unbroken pedigree. On them was founded all that we are now accustomed to admire and revere as the genuine offspring of the Christian religion. Many indeed are the changes, and violent the revolutions, of the art, which Lombard and Byzantine, Italian, Oriental, and Barbarian have brought upon it in its long career; but it is now as a thing that is past, so that we of the present generation can look back upon its birth, and death, and it may be shall witness its revival. We can compare it in all its stages, and view it in all its historical aspects, a phenomenon strange and vast, beautiful and holy; at once original and derived, propagated and self-produced. For who shall deny that the speaking symbolism of Gothic fabrics is essentially their own? They are only grafted on Paganism.*

* The *adaptation* of Pagan emblems and details to Christian use, by which they of course become hallowed and traditional to all time, is beautifully treated by Mr. Hope, in chapters xvi. and xvii. of his learned "Historical Essay on Architecture."

We behold in them the spirit of Christianity as contrasted with the spirit of heathen polytheism. Their Pagan origin is their accident; the Church, in perfecting their development, stamped them with a purer and sublimer character than the world had ever known; an impress which a reverential mind loves to regard as almost more than human, though they are but the works of human hands, and transient alike with every human invention.

It is no idle employment to have been a wanderer among the old churches of England; to have made contemplation even of their material fabrics a pursuit; to have pondered over the mighty changes of times and scenes which they have survived; and to have lingered with mingled sorrow and admiration over the ruins of their departed splendour. Let not any suppose that an insensate antiquarianism is here advocated; much less the irreverent speculation of cold-hearted mechanical enquirers. No benefit can ever accrue either to ourselves or to the Church, if we are to regard Church Architecture as a thing of mere prettiness, of curious investigation, or of engaging mystery. Surely it can teach us a far higher lesson, and impart a graver and more ennobling moral instruction than this. To understand it aright, and to derive the real pleasure and profit it can confer, we must comprehend its spirit as well as its principles.

For want of this, both theorists and practitioners of modern times have failed in their attempts to grasp the gigantic facts which their eyes could behold but their minds were not schooled to receive. Medieval Architecture was not a mere result of piling together stone and timber by mechanical cunning and ingenious device. It was the visible embodying of the highest feelings of adoration, and worship, and holy abstraction; the expression of a sense which must have a language of its own, and which could have utterance in no worthier or more significant way. And even as the soul quickens the body, which without it is but lifeless and helpless matter, so it is the hallowed association and the intellectual interpretation which alone imparts to the student of Church Architecture its full meaning and its true beauty. As well might a grammarian reject the use of letters, as the ecclesiologist overlook the faith and feeling of the middle ages in his endeavours to attain a right understanding of their works. There is a moral in every sculpture, a lesson in every form. And must not all this be a dead letter to us if we care not to comprehend it aright?

Every body has heard or read something about Roman Basilicas, from which the general shape and arrangement of our churches even to this day are derived. A still earlier archetype has

been found in the *atrium*, or largest apartment of a Roman villa. This was a square room or hall of considerable extent, whose roof was borne by four pillars, also disposed in a square, and resembling the plan of S. Mary Woolnoth, S. George's in the East, and some other modern London churches.*

In the reign of Constantine, when the persecution of the Christians had ceased, spacious churches were first erected for their worship on the overthrow and with the materials of ancient Pagan temples. These Basilican churches, as they are called, of which many of very early date still remain at Rome and other places of Italy,† were mostly built in the form of a double cube, that is, twice as long as broad, terminating in a semicircular apsis. Along each side of the central *porticus*, or nave, extended a row of columns and arches, thus dividing the church into three longitudinal parts—our nave and aisles.‡ The principal arches sustained a triforium, or gallery, above, and a clerestory;§

* Bardwell's "Temples," p. 94.

† Few, however, remain without so much of later alteration as to leave the original fabric scarcely recognisable.

‡ This word is derived either from *ala* or *adcella*, *ascella*, a lateral cell.

§ So called, not because the nave wall stands *clear* above the aisle roofs, but from the French *clair*, light, because the

and the roofs were of wood. The choir was not at first a separate excrescence like our chancels, but an inclosed space at the end of the body or nave. This is still seen in the Basilica of San Clemente at Rome, built in the fourth century, "an exact specimen," says the late Mr. Gally Knight,* "of a primitive church."

Among the most celebrated Basilican churches may be mentioned those of S. Paul (destroyed by fire in 1822, but given entire from a previous drawing by Mr. Gally Knight), S. John Lateran, Old S. Peter's, S. Maria Maggiore, S. Agnese, S. Sebastian, S. Lorenzo, at Rome. But, there are many others of great interest and antiquity at Constantinople, Ravenna, Lucca, &c.†

The Pagan Basilicas were justice halls, so called in reference to early times, when they

windows in this part form a direct and strong contrast with the dark arches of the triforium, which was anciently called the *blind-story* ("Ecclesiologist," vol. ii. p. 79). The origin of the word *triforium* is not known: but it has been thought to Latinize our word *thoroughfare*.

* See his noble work, the "Architecture of Italy," 2 vols. folio; Introduction, and on plate I. Bardwell, p. 107.

† See on this subject Bardwell, p. 110, &c. Hope's "Historical Essay," chap. ix.; Dallaway's "Discourses upon Architecture in England," p. 75; Gally Knight, already referred to; and the beautiful German work, "Die Basiliken des Christlichen Roms," folio.

were attached to the palace of the sovereign or chief magistrate, or from the "Archon Basileus" at Athens.* They were not erected in Rome till the year A.U.C. 570, after which about twenty existed in that city.† In the time of Constantine many of them were used by merchants and men of business, after the manner of our Exchanges.

The altar stood on the chord of the arc forming the semicircular apsis. Behind it were seats for the bishop and inferior clergy; and this arrangement still exists unaltered at Torcello, Venice, and Parenzo, in Istria.‡ Formerly the central seat, or tribune, was occupied by the Prætor or chief magistrate, and the rest by his assessors, the judges and advocates. The ceiling of the apsis (*concha*) and other parts were adorned in very early Christian times with mosaic pictures.§ The Basilican form continued to be used with but little variety till the eleventh century.

An important change was introduced by adopting the shape of the Cross for the ground

* See Hope, p. 78; and "Dictionary of Greek and Roman Antiquities."

† Gally Knight, Introduction, p. ii.

‡ Hope, p. 126.

§ See Hope, chap. xv. Hence the interior decoration of church walls with fresco or distemper paintings has the sanction of remotest antiquity.

plan, by the addition of transeptal projections. How and when this form, afterwards so common, was first brought into use, is uncertain. Mr. Gally Knight is of opinion that it was not earlier than A.D. 580.* Another very prominent feature was the dome, or ciborium,† first introduced by the Byzantine architects at Constantinople in the fourth century, and afterwards the characteristic of the Byzantine style. This was originally intended as a vast cover suspended in air over the relics of a buried Saint. And this is the prototype of the mighty dome of S. Peter's, and of our own S. Paul's. Who that looks on the latter ever thinks that it is only a developement of a bean-shell ?

What we call the chancel arch was anciently the triumphal arch,‡ dividing sanctuary from nave, and symbolizing the gate of Heaven. Our crypts are directly derived from the custom of building churches over the martyrs who were buried in the catacombs. The descent to their relics was afterwards managed by an open space called the *Confessionary*.§

* Introduction, p. iii. But Mr. Petit (vol. ii. p. 34) says it was the very earliest given to Christian edifices.

† On the *ciborium*, or Egyptian bean, which presented when cut a cup-like shell, see the "Archæologia," vol. viii. p. 171.

‡ Knight, Introduction, p. iv.

§ See Professor Willis' "Canterbury," p. 23, where the plan of a basilican church is given and explained.

The early churches did not always turn eastward,* though this rule was almost always observed in the middle ages, even at considerable inconvenience from the nature of the locality.

We come then briefly to consider how far this Basilican style of church architecture was likely to have affected the earliest ecclesiastical edifices in this country: in other words, how far Christian architecture was from the first co-extensive with the Christian religion. And we think it will appear both probable in itself, as well as borne out by the few facts we possess, that little more than the general Basilican plan, without the specific details of the style, was communicated by tradition or intercourse with the central seat of Christendom. † What the earliest British churches were, previously to the mission of

* Knight, p. iii.; Hope, ch. p. x. p. 101. Some ancient churches had apses containing an altar, both at the east and west ends (Hope, p. 241. See "Ecclesiologist," New Series, no. ix. p. 119). The most ancient arrangement of all was to place the altar at the *west* end. See Willis' "Canterbury," p. 29. At Brixworth there was both an eastern and a western apsidal termination.

† See Britton's "Architectural Antiquities," vol. v. p. 119. Ancient ecclesiastical writers speak of churches being built in England *opere Romano;* but no existing remains verify the expression, unless very loosely interpreted. Professor Willis ("History of Canterbury Cathedral," pp. 9, 27,) shows how the ancient Saxon church of that city, built by Romans, agreed in many respects with the Basilican arrangement.

S. Augustine, we know not. Christianity having become almost extinct in England by the end of the sixth century, oppressed by the ferocity of the invading Saxon horde, by whom the churches were destroyed and the priests driven out, and having received new life and vigour by the apostolic mission of Augustine from Rome, we may be sure that Roman influences were not altogether wanting in forming an ecclesiastical style in the newly converted country. Thus, the Saxon churches had apses, as at Worth, Sussex, Brixworth, Wing; the remains at Little Welnetham, Suffolk; the Minster, at South Elmham, near Bungay;* and Castle-Rising;† aisles, as at Brixworth, and S. Michael's, S. Albans; the cross form, as at Worth; all which must have been derived from Rome. Let us also consider some other circumstances of the case. Many Roman buildings had long existed in England, and must from their superior size and style have become in some measure familiar models. But the indigenous and barbaric style still maintained considerable sway; for S. Gregory allowed the Saxon idol-temples to be converted into churches;‡ and

* "Ecclesiologist," vol. i. p. 166.

† Ibid. p. 167.

‡ Churton's "Early English Church," p. 46. Professor Willis (p. 19) thinks that after the barbarians had destroyed the ancient buildings, and obliterated their rules, on becoming

there was little or no opportunity for the early inhabitants of this country to Italianize to any considerable extent, from the deficiency of proper materials for columns, architraves, and other members, which were abundantly supplied in Italy from the ruined temples. In England, and other northern countries, architects had to work with bad materials, and to adapt their style to its capabilities.* Hence we explain that very singular kind of masonry which has not inaptly been termed "stone carpentry,"† and which is seen in the tower of Earls Barton, Northamptonshire, and a few other Anglo-Saxon churches. Here we clearly see wooden construction and design contending with stone materials; and it is evident that these and such-like edifices exhibit vestiges of the indigenous barbaric style much more than that of imitated Roman work.

settlers in the country, their architects worked as "unschooled imitators" on the ruins and fragments they found.

* Dallaway's "Essay," p. 4; Rickman p. 4.

† "Hints on the Study of Ecclesiastical Architecture and Antiquities," p. 5. There can be no doubt that the great majority of Saxon churches were of wood; see "Britton's Architectural Antiquities," vol. v. p. 115, &c.; and "Churches of Yorkshire," No. I. p. 15, for the proofs of this. Hence it appears much less astonishing that there should have been fifty thousand churches in England in the Saxon times. (Blunt's "Reformation," p. 24.) There are now not more than about one fourth of that number.

Yet the frequent missions and pilgrimages to Rome, together with the importation of Italian churchmen, which took place as early as the end of the seventh century,* must have exercised great influence upon ecclesiastical architecture in England, just as in after ages, when the Gothic or Pointed style was in its early growth, some details were imported from the Saracens by the votaries of the crusading expeditions. Again, the aid of foreign workmen and artificers was sometimes called in by the Saxons in planning and erecting their churches; † so that, on the whole, it seems unreasonable to look for any other than a mixed sort of semi-Roman designs, which is in fact precisely what the most recent researches have brought to light.

While, therefore, in other countries, as in France and Germany, another development of the Romanesque family was being matured, which was

* Blunt's "History of the Reformation," p. 12; Churton's "Early English Church," p. 130. As the Pope claimed jurisdiction over the Church in this country as early as A.D. 700 (Blunt, p. 50), the intercourse with Rome and the appointment of foreign prelates was certainly nothing of unusual occurrence. Mr. Churton ("Early English Church," p. 39) would have us to believe that this claim was one of much later times. But in fact it seems to have been coeval with S. Augustine.

† Bloxam, p. 6. ed. 7; see particularly Hope, chap. xx. p. 190.

afterwards imported into this country by King Edward the Confessor, and is now called *Norman*, our Saxon ancestors appear to have formed for themselves a tolerably regular and uniform, though rude style, something midway between indigenous and Roman in its details. The buildings left by the Romans in this country, though now rare, must have been sufficiently abundant long after their departure from the island; and the few specimens we have, as an archway at Lincoln, Richborough Castle, Kent, Burgh Castle in Suffolk, and part of a ruined wall at Leicester, * agree pretty nearly in the style of masonry, and the use of large flat bricks, with the construction of some Saxon remains, such as those at Brixworth, the ruined church near Dover Castle, and part of the church of S. Michael, and the Abbey of S. Albans. †

* Specimens are engraved in Britton's "Architectural Antiquities," vol. v. p. 260; See also vol. ii. p. 62, where it is shown, in a very elaborate paper on Anglo-Roman buildings, that they were mostly of poor character, built of bricks and rag-stone. Roman bricks were not very unfrequently used in after ages. They occur in work of the fourteenth century at Wymondham Church, Norfolk. Perhaps, however, they were manufactured after the Roman shape. S. Botolph's Priory, Colchester; S. Nicolas, Leicester; Darenth Church, Kent; S. Martin's, Canterbury; even the tower at Castle Rising; have these bricks.

† Archæologia, vol. iv. p. 73, &c.

Such then were the humble beginnings of English Church architecture, which for many centuries afterwards may be said to have run a career of undying splendour, occasionally changing, yet never really becoming deteriorated, while the spirit of religious faith and liberality remained unimpaired. Its final decline or debasement, in respect of principles as well as of detail, commenced with the reign of Henry VIII. The troubles of this and the succeeding reigns gave, in England, a death blow to its yet lingering and occasionally energetic and beautiful efforts. It was most unhappily and unworthily succeeded by what we may call the Classic or Pagan age,* for which the revival of literature, as it is called, and the extended use of the art of printing, together with the overthrow of the ancient Faith and suppression of the monasteries, prepared the way. Then, the great and chivalrous associations of the Middle Ages being lost, as well as the piety and taste which had eminently characterised them, heathenism was once more invited to lend its aid in forming for newly enlightened Christians a worse than brazen era of architecture. Henceforth,

* In fact, the downfall of the Freemasons, who alone held the secrets of the Gothic art, brought along with it the downfall of their craft, which others knew not how to practise. See Hope, p. 463.

nothing was admired but Grecian and Roman structures and ornaments:* nothing was appreciated but the designs and emblems of idolatry. So perverted and infatuated was the taste of that time, that the once Catholic and beautiful England, the land of mighty Abbeys, Cathedrals, and Churches without number, was everywhere disfigured with ugly and unchristian piles in burlesque imitation of the foreign shrines of heathen gods. Then it was that the ancient and national style of architecture was called in ignorance and derision *the Gothic.*† The term is in itself absurd and calumnious; but it has now become so general that it avails little to endeavour to supersede it by another.

England was the country in which the Gothic

* Yet it is very interesting to observe how the Catholic feeling lingered in many buildings till about the age of Charles II. Churches, indeed, were more pulled down than built after the reign of Henry VIII; but not a few alms-houses, hospitals, and old English mansions exist, which evince *sound principles* in the buildings of the ensuing century. There is an almshouse at Little Thurlow, near Newmarket, of about 1600, worthy of any period.

† See Whewell's "Notes," &c., p. 50. Bardwell, p. 147, observes that the term is in fact much older than the seventeenth century, as it occurs in ancient documents exactly in its modern acceptation. Mr. Bloxam, p. 19, refers the term to Wren and his school. Mr. Hope, p. 464, says it was intended as a synonym with all that is barbarous. It was first given in Italy (ib. p. 332).

or Christian style was most exquisitely and most sumptuously developed, especially in respect of its details.* But France, Germany, Holland, and the Low Country, and even Italy to some extent, used the very same style, and with only some comparatively trifling differences. From the latter country it was to be expected that the ancient and national school of art, adapted as it was to climate and materials, and endeared by association, should never be entirely banished in after times.† Nor was it reasonable that it should, when its adoption by the first Christians had hallowed and perpetuated it. The Italian style only becomes inappropriate and displeasing when out of place, and a strange uneasy settler in a foreign clime. It is vain to defend the architecture of S. Paul's in London by that of S. Peter's at Rome.

The Pagan Age extended over the same coun-

* Dallaway, p. 81. Mr. Hope (chap. xxxvii) thinks that England "almost always exhibited the last specimens of every new modification introduced in the pointed style," and he much prefers the principles of composition in the continental churches. He remarks, too (p. 361), that the architects of the great English edifices have in all ages been mostly foreigners. Mr. Petit (vol. ii. p. 80—83) contends that England surpasses the Continent in its principles of design, and especially for having given each of the styles a certain delicacy and purity for which we look elsewhere in vain.

† Whewell, p. 33 ; Willis' "Architecture of the Middle Ages," p. 3 ; Hope, p. 366.

tries and at the same period, and seems to have attained the height of extravagance in the last century. During all that long and dreary time (to speak ecclesiastically rather than politically), a vast quantity of the finest medieval remains was constantly being destroyed* in the most ruthless manner to make way for classical innovations.† The ancient style was neither understood nor appreciated; its noble and matchless works were deemed but the results of benighted superstition or perverse barbarism, and were annihilated as such without a pang or a feeling of remorse.‡ Incredible as it must seem to those

* It is but fair to remember that the Puritans of the Cromwellian faction did much more in the way of wilful destruction and desecration than even the so-called Reformers. We can scarcely enter the humblest village church without noticing the vestiges of some early brass cross, or frescoed wall, or gilded screen, or stained glass window. Till Cromwell's time, the beautiful cloisters of Peterborough Cathedral, with all their stained glass windows, remained entire. Puritanism began with Edward VI., brought forth its fruits under Cromwell, and became a settled principle under William III.

† For example, the beautiful Early English nave of Llandaff Cathedral was demolished, and a most unsightly Roman temple erected in its place ("Ecclesiologist," vol. iii. p. 10). Everywhere the finest windows, monuments, and roofs were sacrificed for trashy Italian masks and insertions (See Willis' "Canterbury," p. 106). But we must attribute all this to the taste of the age rather than the change of faith; for England was not worse treated than other countries have been.

who have now attained more correct views of the medieval Church and its great and glorious monuments, it is a fact, that till the last ten or twenty years the real and true view of Christian architecture never dawned upon us. Though now and then an individual writer or artist arose, who advocated the cause of Christian art over that of revived Paganism, yet these few were laughed at, and their works little heeded.* Others, who undertook the illustration of medieval remains, thought themselves bound to put forth at the same time the most malignant and calumnious attacks upon the faith which had reared them, as false as they were uncalled for on the part of the writers.† Were these the

‡ That educated men should have been so deluded is truly wonderful. Who would believe that the exquisite Gothic woodwork was ejected from Jesus College Chapel, Cambridge, (it may still be seen in a neighbouring village church,) the roof ceiled, and the interior completely paganised, at a great and most needless cost!

* Towards the end of the last century, John Carter published his splendid folio works on Christian architecture, sculpture, and painting. His frontispiece of Westminster Abbey in the olden time proves how keen a sense he had, and how correct a view of England in the days of yore.

† The works of Storer and others are full of scoffing and insulting remarks about the superstition, &c. of the Middle Ages, truly *dark* to their apprehension. It is sad to find such a spirit in treating of such a subject. Even Mr. Rickman could have felt little more than an antiquarian interest in his pursuit.

men to feel all the poetry and the religion of ancient church architecture? Thus the Gothic style continued so little known and practised that the few attempts at designing * which were made invariably proved complete failures; and we now look with as much surprise on the handywork of the last century as the next generation will perhaps feel on regarding ours. With bad taste and ignorance of true principles was associated an unreal and perishable kind of construction, plaister for stone, scanty walls and weak roofs for the solid massiveness of ancient edifices; so that people could not help feeling that they were building but for themselves, where their predecessors had built for ages yet to come. It was found, too, by a sad experience, that there evidently were some very decided and important laws which regulated the principles of Gothic composition, and that there was, after all, something more than the mere caprice and extravagant fancy which Sir Christopher Wren and persons of his school pretended to believe, and

* Those who have seen certain works (which it would be invidious to particularise,) containing "designs for Gothic churches," &c., set forth as *models* some ten or a dozen years ago, will certainly be unable to suppress a smile. We augur some improvement in designs for parochial buildings from the appearance of the Messrs. Brandon's excellent new work, "Parish Churches," which contains a good selection of the most available ancient models.

took great pains to teach. Thus gradually, and as it were reluctantly, a little more attention was given to the general subject of medieval art; and now, towards the middle of the nineteenth century, such extraordinary interest has been universally excited, that difficulties seem to vanish fast before increased enterprise and intelligence. Our artists make drawings of perishing remains; proprietors and corporate bodies are exerting themselves to preserve what they so lately gloried in destroying;* and above all, the public appreciate and call for the good old Gothic style, so that very beautiful new churches can already, or at all events soon will, be erected, perfectly in the spirit and details of the best medieval models. This happy improvement in taste has been greatly promoted by a number of excellent publications, among

* The condition of parish churches generally throughout England is still very bad, and often absolutely startling to any one who knows what they ought to be, and what they were once. Yet there is no comparison between their present state and that which was commonly found twenty or even ten years ago! It has been a great point to make church desecration a matter of notoriety and disgrace, and to awaken a feeling which will everywhere revolt at its occurrence. While such things were acquiesced in by all parties, there was sure to be no lack of them. A few strong words and a little public indignation have not been altogether thrown away in this matter.

the first and most important of which may be enumerated those by Mr. A. Welby Pugin, to whom unquestionably belongs the distinguished honour and privilege of having, both by precept and practice, first held up the torch of truth and right feeling to the benighted votaries of the classic styles.

These works, with an increase of religious reverence, and our own individual convictions arising from personal research and a rational view of the subject, are beginning to make us wonder in our turn how our ancestors could possibly have been induced to import a foreign style for purposes which the wonderful versatility of the old national Gothic was abundantly competent to serve. Did they suppose that halls, and bridges,* and market-houses, shops, dwelling-houses, and street fronts, were not wanted in the middle ages just as much as in their newly enlightened times? Yet there was but one style then known in the country, and this style most admirably supplied them all.† We all admit this now, and look

* The medieval builders, though admirable and even scientific architects, were very bad engineers. The few ancient bridges we have (there is a remarkably interesting, though small one, at Bury S. Edmunds,) fully bear out this remark. In fact, good engineering is as much the result of our civilization as good architecture was of their religion.

† See Mr. Pugin's very ingenious work, "An Apology for Christian Architecture," "Ecclesiologist," vol. i. p. 161 ; ii.

with apathy at least, if not with dislike, upon great heathen piles, made up perhaps of cast iron, sham marble, stuccoed brick-work, and plaister of Paris ornaments, like the new Fitzwilliam Museum at Cambridge, and heartily hope such tasteless things will not any more disfigure our fine country and our famous Universities.*

To the Gothic style then let us now turn our attention. We are all deeply interested in it, and all eager to know something about it, for every body is now talking of it and going here and there to look at old churches and ruins with the

p. 5, &c. ; iii. p. 37, &c., and 123. See also the powerful and eloquent arguments in chap. ii. of Mr. Pugin's "Contrasts."

* It is difficult to say too much or speak too strongly on this subject. Apathy and indifference are the very worst enemies which a good cause ever had to contend with ; and the Vandalisms committed on our finest old buildings are so distressing and deplorable as fully to justify these remarks. To take the single instance of the University of Cambridge: the Museum, Library, Senate-house, Emmanuel, Downing, S. Catherine's Hall, parts of S. Peter's, Caius, Christ's, King's, and Queen's Colleges, the Library of Trinity College, the Chapel of Clare Hall, the interior of the chapels of Trinity, Trinity Hall, Magdalene, Jesus and Queen's Colleges, and of Great S. Mary's Church, have all been Italianized, besides numerous other parts in various places ! It is impossible not to see that the authors of these misconceived designs never realized the palpable truth, that "while Grecian and Italian forms have little language for the Christian mind, the architecture of the Church speaks out in every portion and in every form." ("The Hours," p. ix.)

keenest curiosity. To know the general principles is by no means difficult; and when these are attained, and we have been told how to examine the old Gothic piles, and what are the uses and meaning of all their parts and arrangements, we have something definite to begin upon, so that by sketching, noting, comparing, and discovering, we may improve ourselves wonderfully by our own exertions. It may be that even the seven editions of Mr. Bloxam's admirable manual have been inadequate to supply the demand for information; or at least that the literary world is wide enough to hold one more little book on Ecclesiology, without encroaching upon a work which of its kind could hardly be better than it is.

And first, it is surely one of the most interesting parts of the science to be able to determine the dates of buildings. For each of the medieval centuries has a certain style of its own, and each style again has its minor peculiarities, according as it was merging out of the preceding or into the succeeding period. But not to anticipate our proposed plan of treatment, let us premise a few observations on the Gothic style generally, considered as the Catholic representative and exponent of the Mind of the Church.

It must appear to any reasoning being both natural and proper that the Church should have

gradually developed for herself a peculiar, characteristic, and symbolical architecture, at once adapted for the celebration, and conveying to the moral sense of the worshipper the awful and mystic meaning, of her religious rites. Thus the ingenuity of man and his zeal in the service of God, as well as an innate tendency to the objective expression of his faith, led him to design structures proportionate at once to the outward requirements of worship, and to the wealth, and peace, and prosperity of a Christian land. It seems a principle inseparable from any healthy and rational view of the Church and of Religion, to set apart for divine worship certain buildings, and to make these buildings so much the more costly and elaborately beautiful than secular ones, that is, than the mere habitations of man, as their uses and objects are higher, purer, and more exalted. It has ever been the natural tribute of gratitude and adoration, due from man to his Maker, to consecrate the best of His gifts to His honour, by erecting temples to His glory, as testimonies of their piety and faith.

Such, at least, were the recognised principles of the Christian Church from very early ages ;* and those persons seem incapable of realizing some of the highest and purest actions and emo-

* See the account of Constantine's Churches in Eusebius (Translation of the Life of Constantine, 1845, p. 141).

tions of the human mind, who, in these later times, consider them but as the workings of a blind superstition, and would carry us back to the humble sheds and upper rooms as fit models for our own places of worship, simply because they were the earliest which the Church ever knew. They were wiser who thought that the offerings on her altars should always be proportioned to her increasing influence, and her outward dress accord with her spiritual dignity. We know that even the Saxon churches and monasteries were rich in golden and other precious appurtenances for the service of the sanctuary, of which frequent mention is made in history: in this respect, indeed, they undoubtedly far surpassed the churches of modern times, which in England at least very seldom contain *any moveable article of any value,* either in books, vestments, plate, paintings, or other furnitures. We may be certain of this; that meanness and parsimony in religious service, disguised as it sometimes is under the specious advocacy of simplicity and purity of worship, or of a return to the most primitive times, is a sure sign of an unsound state and unreal profession of religious principles.

Not, however, to dwell longer on a position which the practice of these later days may have rendered it unpopular to defend, but taking the fact as we find it, that the Church of the Middle

Ages, did, by a gradual development and adaptation to its wants and usages, arrive at a peculiar kind of architecture, of amazing cost and magnificence, which was founded, indeed, on most primitive models, but created by and for itself: let us proceed to trace the history of that development somewhat more in detail.

CHAPTER II.

NOMENCLATURE AND CHARACTERISTICS OF THE STYLES.—I. THE ANGLO-ROMANESQUE.

MANY are the terms adopted,* and various the periods assigned by recent writers in classifying the styles of English Church Architecture. To suggest new methods of arrangement, and new terms to express them, perhaps only tends to confuse and perplex the elements of the science; and some of those already proposed are sufficiently appropriate. We shall, therefore, select such as appear to us the best, adding the dates now generally received on the authority of the first ecclesiologists.

The ordinary classification is under the following heads :—

1. ANGLO-SAXON,
2. NORMAN,
3. SEMI-NORMAN, or TRANSITION,
4. DECORATED,
5. PERPENDICULAR,
6. DEBASED;

* See them enumerated at length in Britton's "Architectural Antiquities," vol. v. chap. i. p. 31, &c.; "Ecclesiologist," vol. i. p. 192.

and these are adopted from Rickman by Mr. Bloxam.* But they are somewhat too general and indefinite, requiring as they do extension and sub-division, before they can be said to represent fully and distinctively the characteristics of each style; since the varieties introduced into any one of them in the course of a century, and the intermediate or Transition steps by which one was blended into the other, should be separately considered.

We venture to propose a more explicit nomenclature of the styles by the following table, accompanied by dates.

I.—ANGLO-ROMANESQUE.

1. Early British or Anglo-Saxon.
2. Ante-Norman, from about 950 to the Conquest.
3. Norman, 1066 to 1170.
4. Transition, 1170 to 1200.

II.—GOTHIC.

5. First Pointed, 1200 to 1240.
6. Late, or Florid First Pointed, 1240 to 1270.
7. Geometric Middle Pointed, 1270 to 1330.
8. Complete Middle Pointed, 1330 to 1380.

* P. 20, ed. 7.

9. Third Pointed, 1380 to 1485.
10. Florid Third Pointed, 1485 to 1546.
11. Debased, or semi-classic, 1546 to 1650.

To which might be added, (to complete the cycle, by bringing church architecture round again nearly to the point whence it started),

12. Revived Pagan, 1650 to 1840.

In this table First Pointed is what is generally called Early English; Geometric Middle Pointed is Geometric or Early Decorated; Complete Middle Pointed is Pure or Flowing Decorated; Third Pointed is Perpendicular; Florid Third Pointed is Tudor.

With respect to the dates of each, it is quite impossible to lay down more than a very general scheme. It must not be supposed that a new style came in with a new reign; for the progress of the art was from the first gradual and continuous, nor was it at any time or place so *suddenly* changed by foreign importations, as to be immediately and entirely superseded, though often influenced by the employment of foreign architects.

Professor Willis* is of opinion that in each

* "Architecture of the Middle Ages," p. 8. Mr. Hope p. 212) says, "At whatever period there happened to be in the sacred architecture, either at its fountain head, or on any other point, any improvement or change, the knowledge and

style we must presume the existence of *Imitation* and *Transition* specimens, and that at the same period of time, and in the same country, buildings may have been in progress, some in the old style, some in the new, others in every possible gradation between them. For when any new style is invented in the country where it appears, we shall inevitably trace it in transition; wherever it is brought in complete, and adopted in works of considerable magnitude, it becomes as it were a rival, and is likely to be more or less closely followed by the native architects; though many of these, through preference of their old fashion or ignorance of the new, may go on building in a style half a century behind others. Thus it must be expected that many perplexing anomalies will occur to us in attempting to assign dates, which in fact would be inexplicable on any other theory. Still on the whole each country had its characteristic development.* Eng-

the adoption of the same reached every other point so rapidly, as almost to appear everywhere the effect more of a general simultaneous inspiration than of a progressive advancement and circulation." But, if this were strictly true, we could not account for the marked national varieties mentioned below.

* This is not sufficiently attended to by modern architects; even Mr. Pugin has set the dangerous example of *foreignising* in his churches and their decorations. True it is that in the Middle Ages improvements were frequently borrowed from the Continent. But this is worse than needless now, for we

land adhered steadily to its own peculiar Third Pointed, while France was running into vagaries with its versatile Flamboyant, the contemporary style.

Of course very great uncertainty exists with respect to buildings presumed to be older than the Conquest. In one or two instances only does history supply definite information, * and so few and partial remains are supposed to exist, that our sources of observation, deduction, and comparison, are much too limited to build any certain theory upon. There are three causes to which we might fairly attribute the general extinction of such early remains; the ravages of the Danes, the enterprise of the middle ages in rebuilding and improving, and the remoteness of time; for who could expect to find a church still standing after the lapse of twelve hundred years? Nevertheless, we strongly in-

have better ancient models of our own to follow than can be procured from abroad. This is admitted by Mr. Petit, "Remarks," &c. vol. i. p. 13.—See Rickman, p. 37.

* There is reason for assigning about the year A.D. 640 to Brixworth, and the church by Dover Castle; about A.D. 676 to the tower of Monkswearmouth, Durham; and A.D. 681 to part of the church of Jarrow in the same county. See Bloxam, pp. 79, 80, and "Companion to the Glossary of Architecture" for other instances. By adopting the term "Early British or Saxon," the question of date is left, as it should be, quite open.

cline to believe in the existence of not a few ante-Conquest buildings, and even to class such as are at present known* under two heads. The first we suppose to exhibit the style in use from the departure of the Romans till, *perhaps*, the reign of King Alfred; the second, which we have called ante-Norman, contains Norman rather than either Roman or barbaric elements, but yet appears, from extreme rudeness and simplicity of workmanship, to claim a higher antiquity than the Norman Conquest. By *ante-Norman* we therefore mean, in fact, *ante-Conquest*, since the Norman style was not established in England till that period, though it is said to have been first imported by Edward the Confesssor, who had resided some time on the Continent.†

One reason for this opinion arises from the consideration that what we call the Norman style was fully developed in France and Germany a century before it was generally adopted in England.‡ To suppose, therefore, that this

* Now amounting to about sixty-five. A list is given by Mr. Bloxam, p. 81.

† Bardwell's "Temples," p. 133.

‡ Dallaway's Essay, p. 82; Whewell's "Notes," p. 29. Probably the statement of Matthew Paris, that Edward the Confessor rebuilt Westminster Abbey, *novo compositionis genere*, in a new style, from which (he adds) others took the idea, has led Antiquaries to the hasty conclusion, that it must have been *totally* unknown in England before. See Bloxam, p. 86.

style was *entirely* unknown in this country till the time of the Conquest, notwithstanding the frequent intercourse of neighbouring nations, and that immediately after that period it arose in all its grandeur and vigour, is antecedently improbable. Again, it is at least as improbable that we should have a vast quantity of ecclesiastical remains of the century subsequently to the Conquest, and scarcely any at all of that immediately preceding it, even though we should allow the fullest scope to the reasons already adduced to account for their paucity. Thirdly, there are plain documentary proofs,* that prior to the Conquest, elaborate and extensive buildings of carved stone were erected; and it is remarkable how well the descriptions accord, in some points, with what we consider Norman work. It is, therefore, very probable that many buildings remain, not clearly distinguishable from Norman work, which nevertheless were erected before the Normans had gained a footing in England. However, it must be observed, first, that buildings known to have been erected shortly before A.D. 1100, are all of the rudest description, and without ornament; secondly, that the evidences afforded by Saxon MSS., coins, paintings

* See Bentham's "Ely," p. 17, &c.; Bardwell, p. 127; Britton's "Architectural Antiquities," vol. v. chap. ii.; "Ecclesiologist," iii. p. 139.

and sculptures,* seem rather to point to a very primitive kind of designs, quite unlike the Norman, though themselves in some instances not of earlier date than the year 1000. Yet we may fairly conclude, that even if the Norman style was not then altogether unknown in England, the great majority of churches, which would of course supply the copyists with the most familiar examples, were of the older Saxon construction.

Some churches exist where Norman work is joined into structures which are evidently of a *much* earlier date. Thus at Clee, near Grimsby, the church consists of three distinct periods; early First-pointed, Norman, and a very rude and primitive tower. In this church a dedication inscription remains,† and with the date 1192, which evidently refers to the early pointed work. Probably at this period the tower, earlier by two styles, was a very ancient one. So also

* See the curious illustrations of the Saxon MS. of Cædmon in the "Archæologia," vol. xxiv. p. 329, &c.; and in the Benedictionale of S. Æthelwold, ibid. pp. 53, 57; also "Archæological Journal," vol. i. p. 25. There is an interesting paper on Saxon churches by Mr. Rickman, "Archæologia," vol. xxvi. p. 26.

† See "Ecclesiologist," vol. iii. p. 138. It is given, but incorrectly represented, in the "Companion to the Glossary of Architecture," ed. 2. p. 70.

at Barnack, and Sompting,* Sussex. In such cases no reasonable doubt can be entertained that the oldest part of the fabric dates from Saxon times; for there is this argument to confirm external evidence: that a church partly pulled down in the Norman era was most probably at the time a very old one.

It must have occurred to ecclesiologists as an extraordinary fact, that however rude and semi-barbarous our Saxon remains appear to be, still they have quite as well defined a character as any other, and that the very same peculiarities of construction occur in all the known existing specimens, or nearly so. This circumstance shows that even at that very early age church-building was a systematized science;† and we must infer, from the remarkable similarity, in some points at least, of all these specimens, either that they are all pretty nearly contemporaneous, or that the very same style continued in use for some centuries.

* "Archæological Journal," i. p. 32. The singular gabled roof of the tower at Sompting resembles that of the Romanesque church of the Apostles at Cologne (Petit, vol. i. chap. iv.), and other German examples.

† Mr. Hope (p. 216) inclines to believe in the existence of freemasonry as early as the seventh century. In the "Archæologia," vol. vi. p. 41, is an engraving of a Saxon inscription at Aldborough Church, Yorkshire, which bears a Freemason's mark.

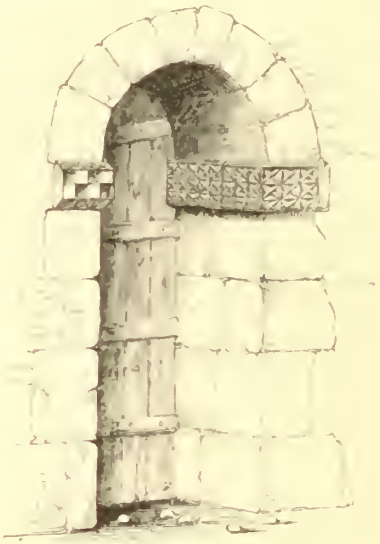
That such churches as Barnack, Earl's Barton, Barton on the Humber, Brixworth, Monkswearmouth, Jarrow, S. Benet's, Cambridge, &c., are of genuine Saxon date we do not entertain the slightest doubt, and we are rather surprised that their age should have been so pertinaciously questioned.* Why should they not be as old as this? They are all of a style quite peculiar, quite distinct from any other, rude, unscientific, primitive both in construction and appearance. What we have called ante-Norman bears more decided marks of approach to the plain and heavy Norman work in use shortly after the time of the Conquest, as the transepts of Ely Cathedral. To this second period we incline to refer the tower of S. Benet's, Lincoln, the seven Lincolnshire churches described and illustrated in the Ecclesiologist,† S. Mary Bishophill Junior, York,‡ Wittering, and Daglingworth, Gloucestershire. We have a very strong suspicion that parts of

* The author of the article on this subject in the "Glossary of Architecture" seems very desirous to prove that they are not generally so ancient. Our own opinion is, that the evidence is, on the whole, decidedly in favour of a very remote antiquity.

† Vol. iii. p. 138.

‡ Ibid. vol. i. p. 190. These eight churches were first pointed out as probably of ante-Norman date by the author of this work. To these may be added the towers of Great Dunham and Newton Churches, Norfolk, which are decidedly Saxon.

churches of this era (say from the time of Alfred to the Conquest,) are not quite so scarce as is generally supposed. Arches and doorways, square-edged and plain, without shafts, and having only a rude and perhaps coarsely ornamented impost, occur often enough. We have seen many belfry arches of this kind—a portion of a church which is likely to have been preserved in rebuilding the rest of the tower. An example of this



DOORWAY, LITTLE ABINGDON, CAMBRIDGESHIRE.

sort of masonry occurs in the north doorway of Little Abingdon church, Cambridgeshire. The ornaments on the imposts are the star and the billet-mouldings,* and therefore it is not Saxon

* Mr. Hope, p. 192, says that the ornaments we commonly

work properly so called. Nevertheless, there are other marks about this edifice of a very early period. The arch is semicircular, square-edged, and rudely constructed in a thick wall.

Without insisting upon the early date of this description of work, we would suggest that attention should always be paid to it, in the hope of finding collateral proofs of its antiquity in other parts of the fabric.

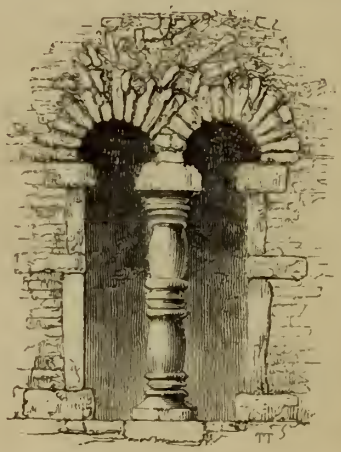
The principal features of Saxon work have so often and so fully been detailed that we shall only briefly recapitulate them in this place.

1. Towers.—Without buttresses or staircase. Usually divided into two stages by a square-edged string-course. Distinguished by a peculiar masonry called *long-and-short work* at the angles, that is, by oblong quoins placed alternately upright and horizontal. Sometimes intersected vertically or transversely by stone ribs, slightly projecting, apparently in imitation of timber structures. Masonry of very coarse rag-

but *improperly* call Norman, the chevron, lozenge, cable, and billet, are common to all Italian buildings of the seventh century. This is a great argument in favour of our "ante-Norman" theory. He has met with them all represented in a Syriac MS. in the Laurentian Library at Florence, written A.D. 586 (p. 264). We may add that it has been stated ("Archæologia," vol. xix. p. 314) that there was a considerable affectation of the Norman customs and language even before the invasion of the Conqueror.

stone, or flint, occasionally intermixed with Roman brick.

2. Arches and Doorways.—Either triangular or circular-headed with plain projecting imposts, and sometimes a square-edged hood continued below, as at Earl's Barton. Belfry arches have rude and unshapely imposts, either in the fashion of Roman architraves, as at Barnack,* or cut into



S. BENET'S, CAMBRIDGE (INTERIOR).

a kind of capital, as at S. Benet's, Cambridge. A rib or strip supports them, generally based on a heavy and rough plinth, or mass of rock.

3. Windows.—Small and rude, the narrowest part in the centre of the wall, that is, splayed

* This bears a most striking resemblance to the impost of a doorway in the Palace of Theodoric at Ravenna of the fifth century. See Gally Knight's Italy, vol. i. plate 15.

alike within and without. Belfry windows usually of two lights, the arch of each often of a single stone, supported in the centre by a mid-wall shaft or balluster,* as in S. Benet's, Cambridge, where it has rude annular mouldings. This kind of belfry-window is the most striking and frequently-occurring mark of Saxon date. Sometimes, as at S. Mary Bishophill Junior, York, and Monkswearmouth, a hood of square rib-work, supported on jutting stone ends, is carried quite round, as above described in certain doorways. Some arches, as at S. Michael's, S. Alban's, and in part of the south choir aisle at Ripon Cathedral, are plain semicircular, set square in the wall, or slightly chamfered, and separated from each other by a massive wall-pier, with plain projecting imposts at the spring.

4. Ornaments or Sculptures.—Plain crosses in relief, or stones with circular holes, intertwining foliage, or rude animals, worked in them, built into the wall. Coarsely fluted imposts occur in two or three instances. But the absence of all ornament is itself a presumption of antiquity.

These five characteristics, Roman bricks, long-and-short work, rib-work, balluster shafts, and triangular-headed arches, may be considered the

* Professor Willis (Hist. Canterbury, p. 30) says these balluster shafts are directly copied from the Roman Campanili.

best criteria of Saxon structures. Ancient coatings of stucco or rough-cast may conceal Saxon features.

A portion of the Cathedral church of Ripon, a small apsidal chapel above the charnel-house or crypt, at the east end of the south aisle of the choir, has been cited as a specimen of Saxon work. It is possibly part of the original church of S. Wilfrid, erected shortly before A.D. 700,* though the style seems ante-Norman rather than of the genuine Saxon kind.†

At the retired village of Heysham, a few miles from Lancaster, is a craggy rock, jutting into the sea. On its crest stands a small lonely ruin—the chapel of Saxon ascetics a thousand years ago. Such at least we would fain believe it to be from the character of its masonry and its singular doorway. On each side of it are

* Apsidal aisles are in themselves marks of very remote antiquity: Whewell's Notes, p. 62. The church of Melbourne, Derbyshire, originally had three eastern apses (Archæologia, xiii. p. 290.)

† The singular subterranean crypt called *S. Wilfrid's Needle*, which extends under the east end of the nave, is now perhaps seldom visited. It is an awful winding passage or catacomb, terminating in a small cell of truly penitential appearance, and divided by a partition stone with a hole in it, to be drawn through which is popularly considered to be a test of virginity. There seems to have been a similar place in Peterborough Cathedral. "At the south end of this north

rows of stone coffins, or rather trenches hewn in the solid rock, now bare and empty, and startingly conspicuous to the view on the first ascent to the summit. A solemn memorial this of the discipline and penitential seclusion practised in the early Church !

Some of the round towers of Norfolk and Suffolk exhibit marks of great antiquity, especially in the belfry arches. But we have met with none decidedly anterior to the Conquest, and the great majority of them are of a much later era.* Their peculiar form is entirely owing to the material of which they are composed, flint and rubble, the circular masonry not requiring quoins, which were evidently difficult to procure; for the observer may notice in these churches many ingenious methods of economising ashlar in the construction of doorways and windows.

Isle (i. e. Transept), near the Quire, is a vault descending into the ground by stairs of stone, and at the bottom a low arched passage going under the church, wherein any might go some five or six yards, and there find the way stopped with the fall of the earth overhead ; but how far further this vault went, or to what end it was first made, I could never learn. Haply it might lead to some penitential purgatorian place ; or, like *Mortimer's* hole at *Nottingham*, be a subterraneous passage to some other buildings which are now perished." Gunton's " History of Peterburgh," p. 102. A similar crypt exists at Hexham, also Bishop Wilfrid's work. Bloxam, p. 71.

* See " Archæologia," vol. xxiii. p. 10.

Cylindrical roll-mouldings occur in the chancel arch at Wittering, and in one or two other instances, as Sompting. But this feature appears characteristic of the ante-Norman rather than of Saxon work.*

CHANCEL ARCH, WITTERING.

The Norman style might conveniently be divided into the Early and the Enriched, were it not that the principles are the same in both kinds,† and that the mere addition of ornament is an accident rather than a characteristic distinction. Hence, although this style embraces the very plainest and the very richest specimens of work, from the low massive columns and

* By a mistake, this woodcut has been reduced from Mr. Bloxam's, instead of from an original drawing in elevation made to a scale.

† Whewell's "Architectural Notes," p. 280

square-edged arches of Rochester and Ely Cathedrals, to the florid decoration of Kilpeck church, Herefordshire, and from the plain arched aperture in the wall to the seven-fold moulded orders of the chancel arch at Tickencote, Rutland,—still one description comprises alike the essential features of both.

"When the barbarous grandeur of the Romans caused them, at the expense of simplicity, to substitute the arch for the epistylium (or architrave), they did not attempt to ornament it *appropriately*, but only gave it the appearance of a *bent architrave*,* leaving to our Gothic architects the full development of its powers. The next step after the introduction of the arch was the springing of semicircular arches from the *capitals* of pillars without the intervention of the epistylium, and here we recognise the incipient Gothic."†

This breaking up of the horizontal line of entablature surmounting the Grecian column, without at the same time losing its interrupted outline, is in great measure what imparts that appearance of horizontality to Norman architecture, which the pointing of the arch, the subordination of the capitals, and the continuity of

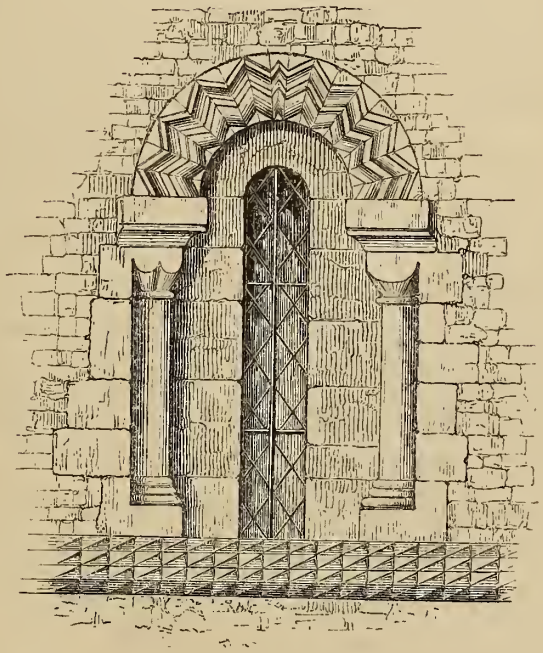
* The sub-arches in recessed Norman archways are derived from the *fasciæ* or overlapping courses of the classic architrave.

† Bardwell's "Temples," p. 147.

mouldings from the base to the crown, converted into the directly opposite, the vertical, principle. The prominence of the heavy abacus, and the semicircular form of the arch, are not suggestive of ascendancy. The thickness of the piers only gives the notion of an isolated piece of wall, and they do not, like the slender clustered column, carry the eye involuntarily upwards. Their breadth bears that proportion to their height, that the latter idea does not particularly predominate over and subdue the former. Hence the Norman style, retaining classical principles without classical gracefulness of proportion, must be considered a clumsy, unwieldly, undeveloped conception; ugly when very plain, barbaric when much enriched; grand in respect of bulk, solidity, endurance; heavy in respect of component parts; not pliant and versatile like the Gothic, but stubborn and unyielding in its nature for the necessities of composition. The windows of the early period (there are two or three in their original state in the east wall of the north transept at Ely,) seem to have been of the plainest description, simple semicircular-headed apertures, slightly splayed within. The addition of side shafts* and cen-

* Perhaps one of the earliest examples of this use is in the clerestory of S. Sepulchre's, Cambridge.

tral or dividing column was not perhaps introduced till after A.D. 1100, though the latter *alone* occurs in Saxon windows. The addition of jamb-shafts and a moulded archway either within or without, or both, was a great improvement, as in S. Mary's chapel, Stourbridge, near Cambridge.



STOURBRIDGE CHAPEL.

The aperture of this window is unusually narrow in proportion to its height. Many Norman windows are little more than twice as high as they are wide, which gives an unsightly ap-

pearance, as at Waltham Abbey, Essex.* In fact few things are uglier than a plain Norman light of this kind. Those at Byland Abbey are of immense size. At S. Cross Hospital the jambs and arches are enriched with the chevron both within and without, there being neither shafts nor impost.

Nevertheless, Norman windows are always subordinate, and not primary features in the fabric, as in the Middle and Third Pointed styles.

The chancel archway of S. Giles' church, Cambridge, is known to have been erected about A.D. 1090. It is simply an arched aperture set rectangularly in the wall, with a square hood or label round the arch, and block imposts ornamented with the star moulding. Ely, Lincoln, and Winchester Cathedrals, South Lopham Church, Norfolk, and Waltham Abbey, have portions of Norman work about this date.

The single arch is usually a mark of very early date. The thickness of Norman walls being considerable, a concentric rib or sub-arch was in most cases attached to the soffit of the first, so that each side presented a graduated appearance. The faces were, in the later style, often ornamented with surface mouldings, or the edges chamfered or worked in rolls, or the sub-arch

* Engraved in Brandon's "Analysis," part ix.

rounded off into a semicircle.* The capital was often notched out to suit the bearings of these two orders. Rarely (as at S. Sepulchre's, Cambridge,) it was circular, like the shaft of the column.

The florid Norman,† though almost equally heavy in its composition, was frequently amazingly rich and elaborate in sculptured detail. In many cases every part, especially in arches and doorways, is quite covered with ornament, even to the shafts, the capitals, and the soffits, as in the ruined conventual church near Ely Cathedral. It might be difficult to specify more finished examples of rich Norman work than the interior of S. Peter's, Northampton, especially the belfry arch; but very fine archways remain at Tickencote, Rutland; Stoneleigh, Warwickshire; Tutbury, Staffordshire; Heckingham, Norfolk;‡ Malmsbury Abbey; Middle Rasen and Sempringham, Lincolnshire; and Castle Ashby, Northamptonshire. And a vast number of highly elaborate doorways exist in different parts of the kingdom, this part of a Norman church being

* See this more fully explained in the "Manual of Gothic Mouldings," chap. ii. p. 17.

† Mr. Petit (vol. i. p. 19) says that the *richest* specimens of Norman work are to be found in England.

‡ Engraved, with many other beautiful examples, in Cotman's Architectural Etchings.

usually the most gorgeously enriched, and perhaps for this very reason the most carefully preserved and respected by the architects of the succeeding ages.

Grotesque sculpture (whether symbolical or capricious it is very difficult to decide) forms a conspicuous part of Norman decoration. In fonts, capitals, corbel heads, door-jambs, &c., almost every conceivable travestie of man, birds, beasts, fish, reptiles, trees, and plants, may be found quaintly represented.* Detached statuary scarcely occurs; but figures of Saints in relief are not uncommon, especially over doorways, as at Adel, Yorkshire; Hadiscoe, Norfolk; Elstow, Bedfordshire. Of this some good specimens remain at Fletton near Peterburgh. In Caistor church, not far from the same city, the capitals of the columns supporting the tower have figures of Norman warriors, hunters, and other devices. But it would fill a volume to particularize Norman ornaments. Those who are curious in the subject cannot do better than consult Mr. Lewis's beautifully illustrated work on Kilpeck Church.

Many Norman doorways have the arch filled up by a solid stone, which is generally called

* The *sagittarius*, or mounted archer, should particularly be looked for, as it denotes that the fabric was built in the reign of King Stephen.

the *tympanum*, and is often adorned by sculptures of the SAVIOUR, Angels, Saints, or animals. Sometimes the figure of our LORD is enclosed in the oval form called the *Vesica Piscis*,* (which some have thought the origin of the pointed arch,) more properly the *aureole*,† or glory surrounding entire forms, as the *nimbus* surrounded the heads of divine or sainted Beings. A doorway of this kind remains at Essendine, Rutland, which has often been engraved, and for the first time in John Carter's folio; where it is represented in a much more perfect state than it will now be

* This is a most ancient mystic figure. It is found in Egyptian architecture (Bardwell's Temples, p. 59), and is represented in several basilican mosaics. We observe it in Saxon MSS (Archæologia, vol. xxiv. pp. 53, 57), and in all periods of Christian architecture. The name *Vesica Piscis* is an unmeaning one; Mr. Hope (p. 163) calls it "the rough outline of the fish." In a singularly ingenious paper in the Archæologia, (vol. xix. p. 353, &c.) an attempt is made to show that the principle of all Gothic composition was based on the Vesica Piscis.

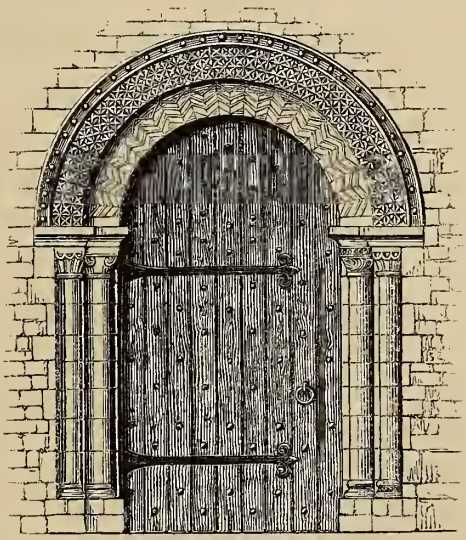
† See an excellent and interesting paper on this subject in vol. i. of the Archæological Journal, p. 73. We do not agree with the writer in his opinion (p. 77) that the figure is not a mystical one. The *nimbus* is often represented on Norman sculptures, and the frequency of its occurrence in stained glass, &c., may make it interesting to some of our readers to understand its real origin. "The Pagan fashion of protecting the heads of deities, often, even in temples, exposed to the outer air, from the insults of birds, each by a metal discus, had by

found. At Ely is a very fine specimen on the south side of the nave; others are engraved in the Archæological Journal, vol. i. pp. 124, 233. At Little Bytham, Lincolnshire, there are cocks sculptured over the doorway. This bird symbolises the Resurrection, and S. Peter's Fall, whence it has surmounted church towers, on their highest point, for at least a thousand years, as we know from Saxon MSS. It occurs on a Saxon sculpture in the tower of Barnack church. Sometimes the tympanum is perfectly plain, sometimes roughened with the hatched or scallop moulding.

Very fine specimens of Norman doorways with sculptured tympana are figured in the Archæologia, (vol. x. p. 128,) from Queenington church,

degrees so associated with that head-piece an idea of dignity, that the Christians adopted the form in order to mark, even in painting, the character of saintship: thence the nimbus introduced over saints in the more ancient paintings and mosaics, so far from being intended to represent a mere aureole or glory of intangible rays emanating from the wearer himself, is only the representation of a solid platter of silver or gold, often adorned with scrolls, foliage, gems, &c., fitting the skull." Hope, p. 155. Hence the origin of the *diapered* nimbus. It is well known that the nimbus quartered with the cross is properly confined to the figure of our Saviour, or that of the other Divine Persons. Mr. Gilbert French, of Bolton-le-Moors, ingeniously conjectures that this cross is the optical appearance perceived on viewing a candle or other bright point with half-closed eyes, as though the Divine countenance were too shining for unveiled sight.

Gloucestershire.* On one of these the SAVIOUR is represented crowning the Blessed Virgin Mary. A very curious doorway remains in S. Margaret's church, York, with the signs of the zodiac among a variety of other ornaments. We annex a spe-



NORMAN DOORWAY, PAIGNTON.

cimen of a good parochial Norman doorway from Paignton, Devonshire.

* Many more examples of the like kind are enumerated and described by Mr. Bloxam, p. 93, &c., ed. 7. It is rather interesting to remark that this doorway controverts the statement of Mr. Bloxam, p. 143, that "we do not find at this early period the image of S. Mary bearing in her arms the infant Christ, or occupying a position over the entrance into a church or elsewhere; which, in the fourteenth and fifteenth centuries, more especially during the latter period, we may observe her image to have possessed." The Blessed

The principal features of the Norman style may be summed up generally in the following brief account:—Massive, low, heavy pillars, sometimes round, sometimes octagonal, frequently mere masses of wall notched into angular recesses,* each containing a detached shaft; a vast variety of surface sculpture, and of ornamental mouldings, as the chevron, or zig-zag,† the star, the embattled, the indented, the billet, the cable, the beak-head, for which the reader is requested to consult the accurate engravings in Mr. Bloxam's work‡ and the Glossary of Architecture. A general prevalence of horizontal rather than

Virgin and Child are sculptured on the Norman font at Sculthorpe, Norfolk, and altars were consecrated to her worship in the middle of the eleventh century (Willis's Canterbury, p. 12); *i. e.* even at the time of the Conquest.

* "A common form is a square, with one or more rectangular recesses at each corner, with a small circular shaft in each, and a larger one, semicircular, on two (or on each) of the faces."—Glossary of Architecture, i. p. 285.

† This is the commonest moulding; in arches, every voussoir, or arch-stone, has one chevron worked on the face; so that, when mitred together, the different widths of the stones cause the moulding to run very irregularly. Mr. Hope (p. 263) shows that Norman mouldings are all imitated from the patterns of early brick masonry, set in variously protuberant and decorative courses.

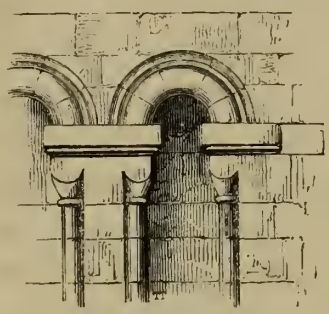
‡ P. 135. It will be observed that many of the Norman mouldings are purely heraldic, and there does not appear to be any mystical or symbolical meaning in them. The uni-

of vertical lines; arches considerably recessed, each order having an edge-roll, as in the nave of Peterburgh Cathedral, or with the scallop or chevron moulding, &c., the latter sometimes set with the points jutting outwards from the wall or soffit; capitals with ponderous square abacus, often chamfered on the under side, and with the edges ornamented; the member next below, the supporting block or *cushion*, variously rounded or bevilled away to meet the circular shaft. A very frequent use of arcades, both within and without, often carried in tiers, row above row, to a great height, even to the parapet and clerestory, as in the tower and south-west wing of Ely Cathedral. These arcades sometimes intersect, distinctly suggesting the pointed arch* in the segments resting directly on the columns; and very often the columns or bearing shafts are set double, or even triple, one behind the other, as at Castle Rising; at other times they form mere panels, the

formity of their use in all parts shows how perfectly church architecture was systematised at that early period. Even in the Norman buildings of Sicily, the same ornaments are in great measure preserved. See the beautiful folio of plates illustrating Mr. Gally Knight's "Normans in Sicily."

* Not that there is any truth in the fanciful theory that this was the origin of the form. Mr. Hope (p. 339) well remarks that the use of the compasses in any architect's study must, over and over again, have suggested the *shape* of the pointed arch.

great length of the shafts bearing no proportion to the diminutive arches, which seem squeezed together as if crowded as many as possible into a narrow space, as in the Transepts at Norwich. This principle continued in the First Pointed style, in which, however, the extremely acute point allowed a very narrow arch to be carried up to a height, and therefore to gain a prominence, which of course could not be obtained in the semicircular form with a narrow span, even by stilting the arch to a considerable degree, that is, by making it more than a semicircle, or placing the capital below the centre.



ARCADE, ELY CATHEDRAL.

In Norman arcades it was a favourite practice to ornament each capital differently, as may be observed in the choir of Bolton Abbey, or to leave them alternately plain, as at Canterbury. Sometimes large structures, as entire façades and towers (as that at Caistor, Northamptonshire,) were enriched with arcades, circular orifices, hatched or escalloped ornaments, &c., so intermixed with pilasters, shafted windows, strings, and corbel tables, as to leave nothing plain. The masonry was of small wide-jointed ashlar, each piece not larger than a man might easily

lift. Towers were roofed with pyramidal tiled or shingled caps, with overhanging eaves, as at Careby, Lincolnshire. But wooden spires covered with lead seem also to have been used by the Normans, as at East Meon, Hampshire; Bourn, Cambridgeshire, and formerly on the west tower at Ely.*

Turrets were finished off with conical cappings of stone, generally octangular, but also round and square. These are of very imposing form, and the origin of both the Gothic spire and the pinnacle. At Worcester Cathedral they are so light and lofty as to assume the character of spires. But in a great many cases the stone capping has been removed, as in the south-west transept at Ely Cathedral, and battlements substituted, to the great detriment of the outline and character of the building. Very fine and perfect specimens of the Norman capped turret still remain on each side of the apse of Peterburgh Cathedral.

Buttresses were not yet introduced. In fact there was not yet that necessity for them which became manifest in later work. In place of them shallow strips of projecting masonry, commonly called pilasters, run up between doors and windows, and generally sink at a level into the corbel table or blocking-course below the parapet, thus

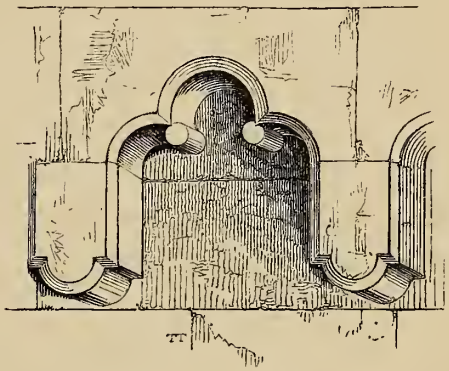
* Millers' Ely, p. 37.

dividing a wall into gigantic panels. These pilaster-strips are often ornamented at the angles by being rounded off into the semblance of shafts ;* and they are broken into one or more stages by plain, chevroned, or hatched string-courses carried round them. (A specimen of the latter is seen underneath the window in page 47.) To make up for the absence of buttresses, a vast thickness of walling was adopted, but very unsuccessfully for resisting the weight of vaulting,† and for two reasons : first, because the walls were never of solid ashlar within, but filled up with loose rubble, gravel, flints, and coarse mortar of very little adhesion ; secondly, because buttresses, subsequently placed at the *points* of thrust, relieved the entire line of walling from the general stress, which often throws the whole side of a Norman church out of the perpendicular, as the north aisle of the nave at Peterburgh.

* This was also done in the corners of rectangular buildings, as at Stourbridge and Hauxton, near Cambridge.

† The pressure of Norman vaulting is straight downwards on the walls, that of pointed vaulting oblique, or lateral (See Hope, p. 312). Yet, from bad construction, or other causes, Norman vaults have a great tendency to push outwards the supporting walls. The aisle of S. Sepulchre's, Cambridge, actually fell down from this cause just before its late restoration. Thus some resistance has been proved by the result to be wanting, though the want might not be known or suspected at the time.

Corbel tables are ornamental fringes of serrated projecting masonry, carried below the parapets or stages of any building. They assume several forms, and became highly enriched in the First Pointed style. But Norman corbel tables are usually some variety of the *undy* or wavy outline; the annexed specimen from one of the monastic buildings at Ely is late in the style, as appears from the trefoiled form.*



CORBEL TABLE, ELY.

The plan of Norman churches seems to have generally been cruciform, with central tower, or longitudinal, nave and chancel with tower between them, thus forming internally a triple division, often without aisles in the smaller parochial edifices, and in not a few instances apsidal at the east end.† In a great many churches

* Mr. Hope (p. 230) refers to a MS. of the tenth century in the library of Salisbury Cathedral, in which trefoiled arches are represented alternately with triangular-headed or Saxon. A Norman trefoil-headed doorway, from Nately Church, Hampshire, is represented in Brandon's Analysis, part ii.

† The apsidal form went almost entirely out of use in parochial churches after the Norman era; a fact which it

portions of Norman walling, string-courses, windows, and other details may be detected, where the fabric has been so overlaid with subsequent alterations as to entirely obliterate the original character, as at Coton and Haslingfield, near Cambridge. However, many little gems of Norman architecture still remain in their perfect state, or with but little alteration, as Barfreston, Kilpeck, Stourbridge Chapel, near Cambridge, Adel, Lastingham, and Goodmanham, Yorkshire, Stewkley, Bucks, and Tickencote, till it was spoiled by being nearly rebuilt half a century ago. Others, as Iffley and Castle Rising, have some considerable alterations of a later age. The little Norman chapel at Shobdon, Herefordshire, of the most curiously elaborate description, was demolished as recklessly as that at Tickencote, in the middle of the last century.* Very many more churches have the external shell entirely rebuilt, but retain within the most beautiful Norman nave and chancel arches. When we regard the evidences of existing remains, we are

seems hopeless to impress upon modern architects. A much worse fault is terminating a church with an apse *instead of* a chancel. The apse is an addition to, often a separate part of, a chancel, as at Kilpeck and Birkin (Churches of Yorkshire, No. vi). Early English apses occur at Eynsford, Kent, and Tidmarsh, Berkshire.

* See an account and illustrations of the remains in the Archæological Journal, vol. i. p. 233.

filled with wonder at the vast number of churches, both small and great, which the Normans erected in a single century. Then let us contrast the total number of churches rebuilded or erected between A.D. 1700 and 1800, and be ashamed, as we justly may, at the comparison.

Vaults * form a most important subject for study and observation in the Norman style, in which instances are particularly numerous.

A vault is a stone roof to a church or other apartment of any size or shape, constructed on the principle of the arch, so as to be borne aloft without the aid of intervening pillars.†

"In a vaulted church we have in general one vault which runs longitudinally along the church; and the upper windows open into the sides of this longitudinal vault by shorter vaulted spaces, which, running perpendicularly to the length

* The reader who would understand this complex subject is particularly referred to the scientific but easily intelligible accounts in the architectural works of Professors Whewell and Willis. There is also a good introductory paper on vaulting by Charles Ellicott, M.A., in the Transactions of the Cambridge Camden Society, part iii. p. 187, &c.

† Though systems of vaulting often spring from central pillars, and with the finest effect. Let any unprejudiced person compare the cloister under the dormitory of Fountains Abbey with the not dissimilar alley under the Pagan library of Trinity College, Cambridge, and say which he thinks the cleverer and better design.

of the building, may be called *transverse* vaults."* Thus the intersection of the longitudinal and transverse vaults may be compared to that of a nave and transepts.

Now in covering a square or rectangular space with a stone vault, the most simple of all methods is to turn a semi-cylindrical arch resting on two sides, like that of a drain, sewer, or tunnel. This is called a *barrel* or *waggon* vault, and is the most primitive form, though not much in use in England. An example, however, occurs in the early Norman building called the White Chapel in the Tower of London. In a perfectly square space it is obvious that such vaults may spring from the opposite sides *both ways*, cutting each other in the middle; and thus the single becomes a double or complex vault. This method is called *Roman Vaulting*.† Here we might begin the work by constructing stone ribs, capable of supporting themselves on the ordinary principles of the voussoirs of an arch,

* Whewell's Architectural Notes, p. 52.

† Whewell, p. 53. A very ingenious method of vaulting, by a series of transverse cylindrical compartments, the sides of which spring from walls spanning the nave by arches from pier to the opposite pier, is sketched by Mr. Petit, vol. i. p. 62, from the Abbey of Tournus on the Saone. The earliest vaults have no groin-ribs, as in the aisles of Norwich Cathedral.

springing from the four corners of the square, and meeting in the centre, where the common keystone would be marked by some sculptured pendant or surface ornament, called a *boss*. Then these cells, or spaces between the ribs, are filled up by a thin course of rag-stone, or brick, clunch, tufa—any light and durable material—wedged together, generally in a slightly bulging form, so that each cell is in reality a second arch, whose sides are supported by the ribs; and of course the ribs derive a mutual benefit by being kept firmly in their places when every one of the four cells or compartments is filled in with rigid and adhesive masonry.*

In this case, when diagonal semicircular arches are erected, it is obvious, that as the diagonal is longer than any one side, and the span of such arches greater than those which bound the rectangular compartment on each side,†—as for instance those which span the aisle or nave straight across at regular intervals,—the crown (or boss)

* Any longitudinal vault may be regarded as a series of rectangular compartments. The ancient term for every such compartment was *a severy*, from *ciborium*, an altar canopy or dome, *b* being turned into *v* by a well-known analogy, as *to have* comes from *habeo*, &c. See Willis'. Canterbury, p. 49.

† Mr. Ellicott calls these the *entrance arches*, in reference to any single compartment, or severy (Transactions, &c. p. 190).

of the diagonal and intersecting arches will stand considerably higher than the crown of the side, or rather end, arches of lesser span. Hence, when the vaulting cells are filled in with masonry, the interior will present a series of irregular hill-and-dale ascents and descents; and this is exactly what may be seen in the aisles of S. Sepulchre's church at Cambridge.

Again, when the cross vault, or Roman method, is used, if the space to be vaulted is a parallelogram, the semi-circular arched vault running in the narrower, or longitudinal direction, will not coincide with the other, because its crown will not reach so high as that of the other. To remedy these defects, the method of stilting the arch of lesser span was adopted, that is, of raising the centre of the arch so much above its impost or capital as enabled it to coincide with the wider and therefore higher arch. But very soon the *pointed* arch (already suggested to the eye in a leaning form by the transverse intersecting ribs) was introduced, first in the narrower, then in both directions. And this pointed form, suggested as it were by a *necessity* of construction, is by far the most probable theory* to account for the general use of a feature, which almost immediately changed the entire character of ecclesiastical architecture.

* It is due, we believe, to Professor Whewell.

"The Pointed arch contains within itself the germ of the vertical principle, but the germ lay dormant, till it was observed by the genius of the great Trans-Alpine architects of the thirteenth century. It was they who perceived what the pointed arch contained; it was they who awakened the latent principle, applied it to their buildings, taught all their parts to shoot upwards, obtained elevation, lightness, grace, and in fact *created* the Pointed style of the north."*

We entirely agree with the view of Professor Whewell,† that while other circumstances *may* have suggested, vaulting *must* have caused the general adoption of the pointed arch. When pointed vaulting was invented, the windows were pointed also to suit the main arches of the vaults, and were thus a consequence, not a cause, of the new style. In the Temple Church, of Transition date, there are pointed arches and vaultings, with semicircular headed windows.‡ In a word, from the pointed vault *naturally* arose both

* Gally Knight's Italy, Introduction, p. 9.

† See p. 56, &c.

‡ Bardwell's Temples, p. 150. Whewell, p. 19. Hope, p. 318. The pointed arch is only one element of the pointed style, though it is the chief one. Verticality, as opposed to horizontality, was the real principle, and this seems to have been suggested by the pointed arch. But the mere use of the pointed arch alone would not make a Gothic building. See Whewell's Notes, pp. 10 and 51.

pointed pier-arch and pointed window; just as we generally find Gothic windows adapted to the height and shape of gables. In no other way could a window be brought high up into the vaulting cell, or made to harmonize with the curve of its groin ribs.

Be it therefore observed, that it is of no use whatever to search for the earliest* occurrence of the pointed arch, since it seems to have been *known* a long time before it was *applied.* It is sufficient for us to follow out its use through the Transition and Gothic styles. The suggestion by the requirements of vaulting must force itself upon the mind of every observer. Most large Norman buildings retain considerable portions of their original vaults; and crypts, chapter-houses, arched gateways, and chapels, afford abundant specimens. It is remarkable, however,

* The pointed arch is, in fact, of almost equal antiquity with any other. It occurs in Egyptian, Roman, Hindoo, and Syrian architecture. Both Saracen and Norman possessed it; it is found at Damascus and Mecca. See Dallaway's Essay, p. 19, Bardwell, p. 138, Hope, chapter xxxiii. In the crypt of the church of S. Denis, finished A.D. 775, are some pointed arches. See also Hope, p. 119, who thinks it suggested itself first at Constantinople. In S. Mark's, Venice, it occurs mixed with round arches of A.D. 976. In a mosque at El-Haram, near Jerusalem, it is found as early as 637, (Transactions of the Cambridge Camden Society, III. p. 203.) However, we have no desire to trouble our readers further with this purely antiquarian question.

that there is no example of a nave vaulted by the Normans in this country.* The reader must not suppose that the existence of vaulting-shafts alone proves that a stone roof was ever originally contemplated.† For these, when carried to the top of the walls, were evidently intended to support timbers, since the vault must have sprung considerably lower down. It was reserved for the present age to devise sham vaults of *papier mâché*, a ridiculous and contemptible specimen of which has been set up by a modern architect‡ in the transepts of Ripon Cathedral. Peterburgh Cathedral has some excellent Norman vaulting in the aisles and the chapter-house. The nave roof, which is of painted wood, and generally considered of Norman date,§ we do not think earlier than Edward I. or II. Norman groin-ribs, in earlier work, are square; in later, ornamented with roll or zig-zag mouldings.

We now pass to the Transition Period,—a short, but prolific age of church-building,—which is

* That of Durham is of Transition date.

† See Whewell, p. 65. Dallaway, p. 37. It may be observed that the chancels, &c. of small parochial churches, were often vaulted in the Norman era, where wooden roofs were always used in the later styles. The reverse is the case in large edifices.

‡ Mr. Railton.

§ Bloxam, p. 130. Dallaway, p. 36.

characterised by the combination of the pointed arch* with the usual Norman detail. And here, as first in order, we would especially point out to the attention of our readers the very magnificent work of this period in the great west tower and south wing of Ely Cathedral. Perhaps no finer specimen than this exists in the kingdom. The pointed arch, the trefoiled head, and other features of the next period, here just begin to appear, though the whole aspect and composition are decidedly Norman. The vastness of the surfaces which are completely covered by arcading and sculpture, both within and without, from the ground to the very roofs, is almost bewildering to behold. The date is about A.D. 1170. Buildwas Abbey, in Shropshire, has pointed nave-arches on Norman columns; so also has S. Cross Hospital church, near Winchester; and Malmsbury, Kirkstall, and Fountains Abbeys, have this or other peculiarities of the period. The church at New Shoreham, Walsoken, Norfolk, and the west front of Croyland Abbey, are of this date. There are some

* Mr. Petit observes, (vol. i. p. 118.) "The truth is, the pointed arch was found out to be, simply because it was, the fittest for the style now expanding into perfection; it had been gradually familiarized to the eye, and thus, as the other members of the system became ready for its reception, it assumed its proper place, where it asserted and steadily maintained its sovereignty without an effort."

chevroned pointed arches within the west front of Peterburgh Cathedral, which are either of this period or, if later, adapted to suit the character of the rest of the nave. The chancel arch at Essendine, Rutland, is pointed with the chevron mouldings; but it would seem to be of *pure* Norman date.

A common mark of this style is a band in the centre of shafts,* a feature so familiar to us in First Pointed churches. The ruin called the Conventual church at Ely, fondly considered by some enthusiastic antiquaries to be Saxon, has a banded shaft in its chancel arch. This is also seen in the fine remains of S. Leonard's Hospital, near Stamford; and at the west front of the noble church of Ketton, Rutland; as also in the west doorway of Rothwell church, Northamptonshire, of which Mr. Bloxam has given an engraving in page 151.

At this time the span of arches became generally greater, the columns higher and less massive, the capitals to assume the octagonal as well as the circular form, and to be ornamented with a kind of plain palm-leaf foliage, curling at the points into minute volutes, or with a sort of acanthus closely approximating to

* A very beautiful and valuable example is given in Part 11. of Brandon's Analysis, the Chancel arch of Codford S. Mary, Wilts.

the Corinthian capital.* Becket's Crown (as it is commonly called) and the choir of Canterbury Cathedral, illustrate these peculiarities. The columns† are frequently octagonal, often alternating with those of circular form.‡ The bases usually stand on square plinths, the angles of which are filled up by a tongue-like projection of foliage, springing from the base mouldings. Capitals of the smaller shafts are generally square, with coarse foliage, or the *cushion* form, instead of the undercut circular bell of the next style. The use of bold roll-mouldings now generally superseded the shallow surface ornaments of the Norman kind. From the *edges* of the receding members or orders of arches, the deep hollows and semicircular or pointed rolls were extended to the entire archivolt; and we now first observe a small fillet along the outer edge of these rolls, like a band or riband running lengthways. The dog-tooth moulding now first

* See some beautiful illustrations of this semi-classic foliage in Willis's Canterbury, p. 59.

† The term *piers* would be more properly confined to masses of wall between the arches, notched into angular recesses for shafts, and bearing projecting semi-shafts from their surfaces.

‡ This alternation is also found in very early Norman, as at Sawston, near Cambridge, where the arches are square-edged. Norman piers are not always low; they are sometimes of almost extravagant height.

appeared.* In its early form it is usually very large and coarsely worked. It seems to be naturally derived from a double row of chevron mouldings, meeting in a point on two rectangular surfaces of an arch; or perhaps an ornamental variety of the serrated form called the nail-head. The north doorway of S. Mary's, Ely, and the nave arches at Soham, near that city, have transition-Norman mouldings, suggestive of the dog-tooth.

The semicircular arch continued in common use throughout this, and even the First Pointed style. In porches the outer archway is generally pointed, the inner semicircular, as at Barnack. The remains of Byland Abbey afford a peculiarly valuable study of the earliest period of the First Pointed style. Here the windows of the aisles and choir are of remarkable size, with semicircular heads, and widely splayed in the interior. The shafts have square capitals on the west front, and two of the doorways have semicircular arches, with Early-pointed mouldings. The third is trefoil-headed, and a fine and curious piece of ma-

* It occurs in combination with the Norman billet at Canterbury, (Willis, p. 90,) and at the angles of a Norman Font at Tickencote. It is also found in the fine Transition doorway at Orpington, Kent, (Brandon's Analysis, Part I.,) and in one of the same date at S. Peter's, Cambridge, where it has three leaves instead of the usual number, four.

sonry. Fountains Abbey retains some excellent semicircular doorways of the same period. These examples show a lingering love for the old form, which seems to have been given up in despair at its unfitness for the new principles. We believe that for two centuries afterwards the round arch was occasionally adopted, especially in the nave-arches of parochial churches. Glastonbury Abbey, especially the western, or S. Joseph's, chapel, has some curious instances of the mixed round and pointed forms. Columns now began to be clustered, by setting half-shafts against the faces of a square or diamond-shaped core. The idea arose from the attachment of vaulting-shafts to the main pillar. At Fountains Abbey,* S. Sepulchre's church, Cambridge,

* See Sharp's Architectural Parallels, Part II. The shaft, though a decorative rather than a constructive feature, is one of the most important elements in Gothic Architecture. We first find it in Norman work, but its prototype is the square rib supporting a hood or impost in many Saxon buildings. We next find it in doorways, supporting a square or circular subarch, and if there are several of these, an equal number of shafts stand recessed in nooks in the jambs. In very early Norman the shafts are only worked in the courses of masonry: afterwards they are separate upright stones. From doorways they are transferred to Norman piers, both detached, and added as half columns for vaulting, &c. in which case they are always built in the bed of the masonry. In the First Pointed style they were made to stand out from the jamb or column, by a space of some inches behind them. In

and the Transepts at Ely, are curious instances of one and two such parasitical excrescences.

this style only they were made of native marble. In the after ages the isolation of the shafts was dropped, and they were always engaged or adhering to the body against which they seem to be placed.

BRIDLINGTON PRIORY.

CHAPTER III.

THE POINTED OR GOTHIC STYLES.

After A.D. 1200, the powers of the pointed and vertical principles began to be fully felt and rapidly developed. The eye is carried upwards, beyond the crown of a pointed arch, and is not brought round again, and down the opposite side, as by the semicircular. The pointed vault, high gable, slender vaulting-shaft, elongated and narrow window, buttress and pinnacle and spire, are all ascending lines, and nothing seems to leave off bluntly or abruptly. Hence arose that glorious architecture (commonly called, from its almost exclusive prevalence in this country, the Early English),* in which, perhaps, as large a portion of our existing cathedrals, abbeys, and parish churches was built as in any other. The characteristics of this style are as numerous as

* Both this and the Third Pointed, or Perpendicular, are peculiar to our country. The corresponding or synchronous continental styles are the geometrical Decorated, and the Flamboyant. But at Norrez and Ardenne, near Caen, Professor Whewell found as perfect and genuine "Early English" churches as our country can supply. (Architectural Notes, p. 292.)

they are well defined. Now first appear clustered columns (properly so called), long lancet windows, either single or grouped, plain or shafted; now the capitals burst into uncontrolled and luxuriant foliage; spandril spaces are gorgeously relieved by trefoiled and variously shaped apertures; vaulting-shafts spring high above the nave-arches, or are corbelled off on flowery bosses to bear aloft the branching vaulting-ribs; deeply moulded archways show their strong isolated lines of light and shade; detached banded shafts, united at base and capital, and clustering round a central pillar, seem to bear the distributed thrusts of single vaulting-ribs or clusters of arch-mouldings; light trefoiled arcades, embossed with rows of dog-tooth, and with spandrils pierced or sculptured in bas relief, adorn the walls where lately stood the clumsier Norman shaft with its diminutive and contracted arch; now the lofty gable, flanked by the conical pinnacle-turret, and decorated by the richly foliated gable-window;* the bold chamfered buttress, the light fretted corbel table, the shining marble shaft, the gracefully

* The Vesica piscis forms the gable window at Skelton, near York, and S. Leonard's Hospital, Stamford. Gable windows are less common after the Geometric middle pointed age, when niches were substituted. In fact they became less necessary as the main windows became larger and the pitch of the roofs lower.

overhanging capital, and the darkly undercut label and string-course, present to the eye ever-recurring yet ever-varying features. And now the whole contour and composition of buildings is changed from heavy to light, from low to lofty, from horizontal to vertical—we might almost say, from earthly to heavenly, from Pagan to Christian. For it is curious to observe how anxiously the First Pointed architects worked to clear themselves from every lingering detail and principle of the Romanesque. In fact, in almost every instance they ran into an extravagant contrariety, which had to be tempered down and reduced, rather than further developed, in the after period. Thus the *extreme* depth and multiplicity of moulding, pitch of roofs, acuteness of arches, narrowness and length of windows, slenderness and isolation of shafts, might be called the excesses of Gothicism, beyond which, as seen in their earliest exhibition, it was impossible to go. It is curious, too, to notice how Gothic architecture, in its latest form, prepared itself, by a gradual assimilation of principles, to fall away into the *Renaissance*, or revival of that Classic style, from which the First Pointed architects had recoiled as far as they could possibly go.

"As the habit of gazing on peculiar forms by degrees begets a taste for them, and as those

which utility first demands, even when that utility ceases, still are perpetuated by the inclination it produces,—as even consistency and taste require the ornamental additions to harmonize in their outline and character with the fundamental ground-work, those essential forms, all slender, and tall, and sharp ; those long thin pillars ; those narrow and lofty interstices ; those pointed arches, reduplicated laterally and over each other in endless repetitions, and intersecting each other in every way, were imitated and repeated, and carried to interminable lesser and more minute subdivisions in the mere ornamental parts, until at last religious edifices, with their pinnacles, and spires, and broaches, and cusps, and corbels, and tabernacles, and tracery, and ridge-bands, looked like a mass of net-work, or rather a cluster of mere conductors."*

An age of church-building zeal, of faith, piety, and devotion, seems to have revelled and expatiated in the luxury of the new pointed elements. There was a keen rivalry and ambition in churchmen and religious houses, that each one might boast of a nobler edifice, more costly vestments, richer altars, than another. It may truly be stated that the cost of many great churches still existing in this style is almost incalculable. And yet such was the versatility

* Hope, p. 319.

of the very same style, that the humblest and plainest edifices never appear mean and starved in proportion or details. A string, a moulding, a trail of dog-tooth ornament, will set off a whole façade at a very trifling cost; and a correct eye will not disparage the design even by contrasting it with the richest cathedral or abbatial elevation. And the reason of this property has been made the subject of much anxious inquiry. It is certain that geometry * lent its aid in the planning and designing of buildings; but very little advance has yet been made in ascertaining the methods of applying it, which were evidently profound secrets in the keeping of the Freemasons. Probably the equilateral triangle was the basis of most formations. The majority of arches of all sizes will be found to exhibit this figure,

* There are two kinds of architectural geometry; that of *construction*, and that of *design*. In the first Dallaway (p. 153,) maintains that the ancient surpassed the modern builders; and, doubtless, little enough of the science is known to many of our architects. But it is extremely curious to remark how reckless the old masons were about accuracy of measurement. Perhaps no two windows in a church will be found exactly the same in height or width; no two pier-arches of equal span. (See this exemplified in the ground-plans of Kirkstall and Fountains Abbeys, in Part III. of Sharpe's Architectural Parallels.) The other geometry (of design) regulates by undiscovered laws the proportions of the various members and details.

or nearly so, if lines be drawn from the point to the spring on both sides, and again across the span. The theory of the vesica piscis * is of course the same in effect. For instance, most of the best Middle Pointed windows have equilateral arches, and the same height in the mullions as in the tracery; that is, a vesica piscis circumscribed on two equilateral triangles, would measure the extent of the aperture in respect of height and width. In trefoiled arches the cusps or projecting points forming the trefoliation usually fall true upon the sides of the triangle.† Spherical triangles also occur; and various polygonal figures may be developed by drawing lines uniting the different points and centres. Much is due to the authors of the invaluable "Analysis of Gothic Architecture" for having been among the first to investigate and call attention to the geometric formations of mouldings, tracery, and other details of the earlier pointed styles.

Whether the same geometric principles were applied in the composition of buildings which

* See above, p. 51.

† See Potter's Monastic Remains, Plate IX., Tinterne Abbey. Even the pyramidal outline, or grouping of buildings, falls within a triangle. The constant occurrence of the triangle itself in window tracery, and gable lights, and the general triplicity of shafts, windows, mouldings, and foliations, prove the universality of this one leading idea.

certainly obtained in forming their details, seems much more doubtful. An attempt has been made by Mr. Billings* to show that the plan of Gothic buildings was generally laid out by some such rules; and a very eloquent and ingenious writer† has gone so far as to suggest that some number being taken as a base, the proportions not only of buildings, but of all their parts, were regulated by certain multiples of that number; as by making the half width of a church with aisles the normal scale by which all the principal points in the plan were adjusted. However, but a few inadequate proofs are adduced in favour of this theory; in fact, no one system seems to have been discovered, which is not entirely overthrown by applying it to some buildings, however well it may appear to suit others.‡

In truth, that primary law of Gothic Architecture, by which mere appearance seems always to have given way to utility, is directly at variance with the supposition, that any such stringent rule was generally adopted. It is scarcely probable that, had it really obtained,

* Attempt to define the Geometric Projection of Gothic Architecture, London, 1840.

† English Review, No. IV. p. 404, &c. See this article reviewed in the Ecclesiologist, vol. iv. p. 62.

‡ Some general laws of proportion are given by Dallaway, p. 163, which seem not destitute of plausible grounds.

alterations, curtailments, additions in height, breadth, and length, should have been freely made in even the purest ages, by which any such geometrical symmetry must necessarily have been destroyed. Much as has been said on the subject of symbolism,* and undiscovered laws of Gothic Architecture, we are strongly disposed to attribute the almost unattainable perfection of the medieval buildings to the unerring judgment, fine taste, and intuitive feeling of the artists, who built religiously, not coerced by utilitarian employers, and, above all, devoted exclusively to the one style prevalent in their day, without so much as the knowledge of any other, and without any care to imitate their predecessors in anything. *It is the secularizing of the profession which has destroyed the vitality of pointed architecture.* It is the offspring of religion, and cannot thrive without its fostering protection. Why then should we be unwilling to attribute the sublime perfection of ancient buildings to higher influences than geometrical or mathematical rules? Do we not ourselves see the failure of modern attempts singularly

* See chap. iv. of Mr. Poole's "Churches, their Structure, Arrangement, and Decoration." The philosophising theories of the late translators of Durandus, and Mr. Lewis's treatise on this subject, seem to have much of fanciful and questionable conjecture, amidst some undoubted truth.

coincident with modern principles, that is, with a total and even a contemptuous repudiation of any such sublimer conceptions of divine beauty? The fact is, the ancient builders working as a body, not as individuals, cared less about personal profit or celebrity, than about the good of the Church.* If they had intended only to please man's eye, we should not have had their finest works stand alone in the midst of the marsh and the moor. "The elaborate and costly ornaments which were lavished on architecture, were meant to do God honour, though spending their beauties, perhaps, on some remote and secluded wilderness, to be witnessed only by the rude peasants of the neighbourhood, and the birds that hovered about the pinnacle."† Such were the beautiful old abbeys, now ruined to rise no more. The eyes of few but their peaceful inmates, the weary wanderers or the houseless poor, could ever contemplate the costly product of labour and pious pains. But we must return to our First Pointed style, with much apology for rambling so far away from it.

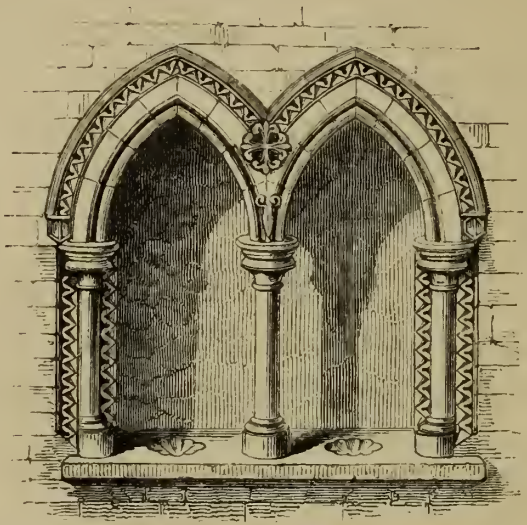
The most clearly marked characteristics of this

* See on this subject some admirable remarks in the Preface to the translation of Durandus, p. xxii. "We do protest against the merely business-like spirit of the modern profession, and demand from them a more elevated and directly religious habit of mind."

† Blunt's History of the Reformation, p. 76.

era, as distinguished from all others, are found in the mouldings, the foliage, the isolated marble shafts, the windows, the sculptured ornaments; all which must therefore be studied as peculiar and universal features of the style. Minor details which *generally*, but not invariably, mark the period, are the buttresses, corbel-heads, parapets and cornices; pinnacles, chamfers, strings, and weatherings. Some one or more of these features will invariably determine the date of a church with considerable certainty to a practised eye. Mouldings are principally developed in arches, capitals, and bases. The first consist of a series of rolls —round, pointed, and filleted in various ways, apparently projecting between deep hollows of three-quarters of a circle, but in reality lying in the square graduated planes of the original uncut block, in the surface of which the hollows are always sunk. Very often, trails of the tooth-moulding occur in the hollows of the arch and between the shafts of the jamb, as at Barrington, near Cambridge, or under the label or hood, as at Glinton, Northamptonshire. The ornament commonly called the nail-head, (which is a small kind of tooth-moulding, left in the solid pyramid instead of being worked in four leaves,) is very common round capitals and between arch-mouldings. And these mouldings are often repeated in double and triple rows, imparting great richness

to the design. Capitals* are either plain or floriated. The upper member, called the *abacus*,



PISCINA, CASTOR, NORTHAMPTONSHIRE.

which projects over the rest, is undercut, with a deep shadowy line on the lower side. It is generally circular, though sometimes octagonal,

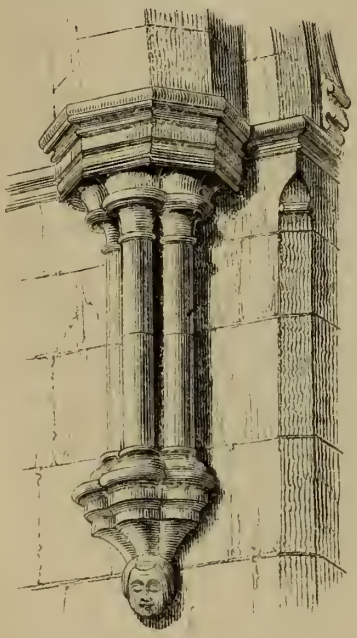
* Plans of piers of this and other styles, compared and contrasted, are given in Mr. Sharpe's Architectural Parallels. The general principle is the arrangement of four or more isolated and banded shafts round a central column. Some piers, (as at Whitby Abbey) stand on a multangular plinth, and consist of a series of engaged shafts standing thickly together some plain semicircular, others filleted, others pointed, or (as, Mr. Rickman expresses it) "whose plan is a spherical triangle with the edge [*i. e.* the apex] outwards." On these pointed shafts, which first occur in Transition Norman, see Manual of Gothic Mouldings, p. 18.

the latter much more rarely in small shafts than in single columns. The member next below is called the *bell,* which overhangs the shaft in the same manner, and with the same undercut profile. Then comes the neck moulding, a plain half circle, or half hexagon.* The bases are very peculiar and strongly marked; but it must be recollected that the same form occurs throughout the Transition style. The base mouldings have a very wide spread, and consist of a hollow, capable of retaining water, between two filleted rolls. In rich examples this is repeated, forming as it were a double base; and below are often added very bold rings or annular rolls; the whole standing on a square or polygonal plinth. The elements of this peculiar base occur even in Norman work. It is, in fact, directly copied from the Attic base with slight modifications.† Another form consists of two plain rolls spreading outwards at the foot of the shaft; also used, and more commonly, in the next style. Some shafts in this style are corbelled off midway, often with foliaged brackets,

* In very richly moulded capitals of this style there is a double bell, by which a great depth of effect is gained.

† The reader will find this subject more fully explained in the "Manual of Gothic Mouldings," Section X. A plate containing sections of capitals and bases, from the Transition to the Middle Pointed era, is given in Sharpe's Architectural Parallels, Part III., and supplies a very valuable study.

as at Teversham near Cambridge, or with a series of base mouldings supported by a head, either of which is a most beautiful arrangement.



POLESBROOK, NORTHAMPTON.

The origin of foliage on capitals, whence it was transferred to bosses, corbels, window and doorway arches and jambs, and other positions, may be distinctly traced through the Romanesque to the Classic, and especially the Corinthian style.—The form, however, of the First Pointed foliage consisting of a trefoiled leaf with long curling stalks (which is preserved with remarkable consistency in all buildings of the same period,) is either unreal and conventional,* or, as some will have it, borrowed from the plant called *geum*,

* Some have thought it derived from the palm-leaves of Palestine, brought over by Crusaders. It is remarkable that even in MSS. and stained glass of this era, precisely the same character is always given to the foliage, whether of real trees and plants, or of architectural details, as in the very curious MS. life of S. Edward and "Liber Bestiarum," in Cambridge University library.

Common Avens, or Herb Benet.* Perhaps, the secluded positions of the old abbeys amidst woods and glens, clothed with verdant herbage, naturally promoted its imitation in stone, it being, in fact, almost the only natural object presented to the eye. Hence, perhaps, we so often find in First Pointed capitals figures of birds sitting amongst the sculptured leaves, as well as of animals, men, as archers or hunters, lizards and other reptiles.†

ALL SAINTS, STAMFORD.

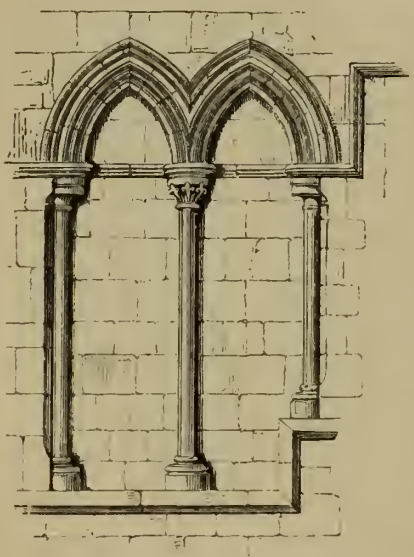
Foliaged capitals are always extremely beautiful, from the free curling tendency of the leaves, which spring upwards out of the neck mouldings, and cling round, or shoot out far beyond, the projecting abacus. At Ely, York, Wells, and a great number of churches, large as well as small, exquisite examples occur. More rarely the capitals of single columns than of the smaller

* See, on the conventional forms of leaves, Mr. John Browne's History of the edifice of York Cathedral, Part IV., where some curious suggestions are offered on the subject.

† A wonderful variety of this kind of mixed ornament in the capitals of York Cathedral, may be seen in Halfpenny's Gothic Ornaments.

shafts are thus decorated. At Great Casterton, Rutland, are some fine specimens in the nave pillars.

A remarkable feature of the First Pointed style, which is scarcely found in any other,* is the continuity and extension of string-courses and labels. Thus, the abacus or upper member of capitals is frequently carried across the span of the arches of an arcade, as at All Saints and S. Mary's, Stamford; or, as in the flanking towers at the west front of Peterburgh Cathedral, a corbel capital (*i. e.* without a shaft) in the centre receives it. Similarly, not only are basement mouldings carried round the bases of shafts, but the shafts themselves are banded, and as it were girded to the wall and to each other, by midway horizontal strings.†



ARCADE, ALL SAINTS, STAMFORD.

* The abacus of Norman capitals is sometimes continued in a string-course.

† There is a joint at each band, and the band is built into the wall, so that it really supports a portion of shaft as a

When shafts became, in the after styles, engaged in the wall, this junction at the several points was discontinued. Hood-mouldings of lancet lights, and the string-course which is usually carried below them, are continued round buttresses and other projections, and they often rise and disport themselves in graduated stages, as if loth to be anywhere broken off, and seeking by some adventurous leap to unite with another by running this way and that to meet its position.

Buttresses are distinguished by having for the most part chamfered edges, often acute triangular

bracket. When the pieces are of considerable length, they are often dowelled to the wall by iron supporters at the back. —It must be confessed that these details, with the capitals, clustered columns, umbrageous vaults, and slender shafts, do bear a most striking resemblance to the tied rods of wooden structures, according to Sir James Hall's theory. We have seen stems of trees, (particularly of the yew) which closely resembled clustered columns. And Sir James proves from actual documents, that many of the earliest churches were literally constructed of rods, wands, and wattled posts. Certain it is, that both the principles and the details of Grecian architecture are wooden, so that there really is something to be said for Sir James's position, that *all Gothic art is merely stone wickerwork.* The tracery of the famous window at Dorchester actually imitates the climbing branches of a tree. The great objection to his view is the lapse of some centuries, and the intervention of the Romanesque architecture, between the wattled churches of the earliest ages, and the richly developed stone-work of the Edwardian period.

heads, and in most cases an overlapping undercut member going round the three sides below the head and the set-offs or weatherings. Very fine examples are those in the choir of Ely, where their contrast with others of Middle Pointed work immediately adjoining them at the west end is interesting. When there are flying buttresses, the head of the buttress reaches above the parapet, as at Lincoln Minster. Otherwise the head is often but a plain slope. One mark of First Pointed buttresses is their position, not set diagonally, but abutting the wall rectangularly, two at every corner. But plain diagonal buttresses also occur, as at Long Stanton, near Cambridge. In large buttresses the foot sometimes spreads out in a wide slope, as at Whitby Abbey. And the chamfer is sometimes so large, that not merely the edges of a square projection are removed, but the projection itself becomes almost a semi-octagon.* Many buttresses of this style are very lofty and slender, and in fact very little more than decorative adjuncts, as in the tower of S. Mary's, and the east end of All Saints, Stamford, the Library near York Cathedral, and at Beverley Minster.

Pinnacles are still, as in the Norman style, heavy stone cappings of pyramidal form. They

* Such are those at Bridlington, (Architectural Parallels, Part V.)

are not however nearly so common. There are fine early examples on the noble church of Great Grimsby, Lincolnshire. Their usual position is on each side of a gable, as at the east end of Whitby Abbey. (Architectural Parallels, Part I.)

Parapets are plain; neither pierced, nor panelled, nor crested with battlements. They generally rise from a cornice or blocking-course of rude heads or notch-heads at intervals, sometimes intermixed with dog-tooth, or from a corbel-table. But in parochial churches eave-roofs were almost always used; and in fact it is rather rare to meet with an unmutilated parapet of this date. There is a perfect one with its cornice at Northborough, Northamptonshire.

A very intelligent and observant writer* has remarked, that the occurrence of the *single* lancet marks a period of incomplete Gothic, because it was from the combination of two or more under one arch that the window of several lights, that essential characteristic of Gothic work, arose. Hence it has seemed advisable to divide the First Pointed period into two eras, the latter commencing from the period when two and three light windows were introduced. The first might very appropriately be called the *lancet,* the latter, (including early Middle Pointed, that is, from about 1240 to 1320,) the *geometric* period.

* Mr. Petit, vol. i. p. 153.

The latter, or Florid First Pointed, is rich in the most exquisitely wrought detail, and often possesses an amount of ornament unsurpassed by any other style. We might instance, as a perfect example of the work of this era, the choir or presbytery of Ely Cathedral, and its western or Galilee porch. The latter has been thought to date as early as 1215, but this seems improbable. The richness of the outer and inner doorways cannot be surpassed, if they are equalled, by anything of the kind in the kingdom. * The transepts of York Minster, the north transept of Whitby Abbey, the west front of Lichfield Cathedral, are all exquisite works of this age. The Abbeys of Westminster, Rievaulx, Tintern, and Netley, just verge into the earliest Middle Pointed. In parochial churches it might be difficult to name better compositions than the towers of S. Mary's at Stamford, and of its neighbour at Ketton in Rutland.

Dripstones in this, and indeed generally in the next, style were terminated by the peculiar ornament called the *mask* or *notch-head;* a detail of uncertain origin, but perhaps derived from the Norman ornament called the double cone. Heads

* It must be observed that Middle Pointed tracery has been inserted in the heads of both, which seem originally to have been differently, and perhaps more elaborately, finished.

are sometimes used, and are generally rather large, and more frequently of bishops, priests, or monks, than in any other style. A specimen of a very fine head occurs over the door of one of the conventual buildings at Peterburgh.

CORBEL-HEAD, PETERBURGH.

In this age the use of foliage greatly increased. Strings and knots of leaves sprouted forth from the naked walls, ran round archways, hung pendent from door and window jambs; and chamfer-heads, cusps, bosses, corbels, spandrils, were all clothed in their stony verdure. The east elevation, viewed externally, of Ely Cathedral, is perfectly glorious; we can name nothing to equal it in the kingdom, from the extraordinary efflorescence of the detail.* "Plain mural surfaces are incrusted over with ornaments very minute and lavishly applied, yet producing an effect of richness from mere exuberance, chiefly of fruit and flowers."†

* It is much to be feared that Mr. Blore, (whose restorations of old buildings are in many cases anything rather than satisfactory,) is making an egregious mistake in designing new pinnacles for this fine elevation in too advanced a style.

† Dallaway, p. 42.

Another method of enrichment, of great beauty, which was now first introduced, was the *diapering* plain surfaces with a kind of shallow four-leaved flower. Specimens occur in many parts of Westminster Abbey, and several are engraved in the Analysis of Gothic Architecture.* But this was even more frequent throughout the Middle Pointed era.† It may be seen behind the canopies in the Lady Chapel at Ely.

Vaulting was still performed in a simple manner; lighter indeed than the Norman, yet infinitely less complex than that of the next style. The two styles may be seen in their perfection and in contiguity with each other in the choir and aisles of Ely. The Middle Pointed is all rib-work, and feathery boss, and intricate ramifications; the earlier kind, towards the east end, is plain quadripartite. Most First Pointed vaulting consists of semicircular diagonal ribs, and pointed arches terminating the compartment on each side. A rib, deeply moulded, runs horizontally along the length of the church,‡ and

* Parts XX. and XXI.

† But it is most commonly found in the geometric period. The base of the tower at Hingham, Norfolk, is beautifully ornamented with strings of this flower. It also exists on the Queen Eleanor Crosses, and at Chichester, and the screen at Lincoln. There are several varieties of it, one with double leaves.

‡ But not always, as at Salisbury.

transverse ribs cross it at right angles, forming the crown of the cellular spaces on each side. The groin-ribs have deep undercut mouldings, often with dog-tooth, and the bosses have the curling foliage of the style. The vaulting shafts are often triple, and spring from a flowery corbel, of which most exquisite specimens exist at Ely; more rarely they rest on the capital of the nave pier, or are carried down to the ground, as in the nave of Chichester Cathedral.*

The use of native marble, chiefly from the quarries of Petworth and Purbeck, must not be overlooked, as it seems to have been nearly† confined to this style. The nature of this material is so hard, and it has been found so tedious and difficult to work in the late repairs of the Temple Church, that we may well wonder at the patience and expense of polishing hundreds of shafts, and working out the intricate mouldings of thrice as many capitals, bands, and bases,

* Mr. Ellicott on Vaulting, Transactions of the Cambridge Camden Society, Part III. p. 195.

† It is, however, used occasionally in Middle Pointed work, as in the beautiful piers of the three western bays of the choir at Ely, and in the Lady Chapel. Fonts were sometimes made of it much later, as at All Saints, Stamford: but this is rare. It was often used for embedding brass effigies, even as late as 1553, at Milton, near Cambridge. At Wells a kind of blue lias, very similar in appearance, is extensively used.

required for a single abbey church or cathedral. In the Lady Chapel of Fountains Abbey, the very strings and abacuses are of this marble, highly polished, and even in the dark undercut hollows as perfectly smoothed as on the exterior surfaces. Those who have seen the newly restored Chapter House of York Minster, will be able to judge of the effect of such work when shining with new and glossy brilliancy, in contrast with the sombre coloured stone. Unhappily this kind of marble is very perishable,* and not only loses its dark colour with its polish, but is apt to become shattered and ragged beyond the hope of restoration. Various attempts have been made to renew it, by the use of cement, boiled oil, and varnish, but with no great success. The west doorways of Peterburgh Cathedral are beautifully relieved by the insertion of slender marble shafts in the jambs; and in the western porch at Ely are some elaborate details in the same material. Even in little village churches, as at Histon, near Cambridge, the shafts of piscinæ are of

* The process of decay in this marble is curious. It is a calcareous oolite, of a flaky character, and is said to stand best when laid in the direction of its bed in the quarry. Smooth surfaces become marked with small speckled indentations, and the decay spreads both deep and wide very rapidly. Unlike other stone, its decomposition in the open air does not seem quicker or more certain than in interior work.

Purbeck marble. This is also the case in Jesus College Chapel. Many churches of this century have internal arcades of various degrees of richness, especially the transepts, even in small parochial edifices, as at Histon, and Thurlby, Lincolnshire.

It is said that when struck smartly with a stick, these columns often emit a musical note; and we have somewhere read of an arcade whose shafts were attuned in regular progression.*

Generally this was the age of arches and shafts, just as much as the next was of crockets and canopies, and the third of panels and vertical monial and tracery bars. Yet certainly there is no more effective kind of decoration than this. When the dividing buttress and pinnacle superseded the bearing-shaft and capital, and the *vertical* and continuous moulding took away much from the distinctive character of the arcade, a radical change, though unconsciously, was introduced into the principles of Gothic art.

In working the difficult mouldings of bases and capitals, we believe that the use of the lathe was not unknown. It is certain that the art of turning was practised in woodwork of the thirteenth and fourteenth centuries, and it seems very probable that it was applied to stone and marble also.

* Thus the inventors of the "Rock Band" have been anticipated in their singular contrivance.

We find bases and capitals were always separately formed, and afterwards affixed to the shaft, sometimes by an iron spike, sometimes by a socket and moulten lead. Even the marks of the centre-point from the process of turning may sometimes be detected.*

Spires of stone first appear in this style, though they are not very common. They are usually of the broach form, that is, capping the tower with an overhanging cornice, and having pyramidal abutments extending from the corners of the square to meet the octagonal plan. The dog-tooth ornament is sometimes seen in the spire lights. Examples are Etton, Northamptonshire; Ryhall, North Luffenham, and Langham, Rutland; Carlby, Wandsford, Downton, Duddington, and Warmington, Northamptonshire; Frampton, in Holland, and Sleaford, Lincolnshire.

Circular gable windows† were used in this style, and even in the Transition period, as at Barfreston, and Patricksbourne, Kent. These

* This is also attested by Gervase: "Willielmus Senonensis, Vir admodum strenuus, in ligno et lapide artifex subtilissimus, ad *lapides* formandos *torneumata* fecit valde ingeniose." Archæologia, vol. ix. p. 113. The machines used in raising stones and beams by the ancient builders, are represented in some fresco paintings and illuminated pictures.

† These are said to symbolize the passion of S. Catharine (Preface to Durandus, p. 91); and hence the spokes, or radii, with which they are filled.

may be directly derived from the small circular ornaments or apertures found in Norman and even Saxon towers, as at S. Benets', Cambridge; Wenden, Essex, and Great Dunham, Norfolk. Dallaway, however,* maintains that we had them in their perfect state from the Continent. A very large wheel window, now nearly demolished, occupied the western gable of Byland Abbey.† There are very rich, though small ones, in the west front at Peterburgh. Other examples occur in the transept at York; at Westminster, Canterbury, Chichester, Lichfield, Beverley, &c. There is a large one filled with flowing tracery in the south transept at Lincoln; but this fine feature is much more common in Continental churches. In France there are instances of wheel windows measuring forty and fifty feet in diameter.‡ The same thing in principle occurs, in combination with other tracery, in the heads of geometric Middle Pointed windows.

A few words only remain to be said on some other characteristics of this style; for, of its

* Discourses upon Architecture, p. 134. Perhaps the earliest example of a Norman circular window is in the west gable of Fountains Abbey. (Architectural Parallels, Part V.)

† This is the earliest, as well as the largest example in the style. That at the Temple Church is a fine specimen, but more of Norman detail.

‡ Dallaway, p. 92.

lancet windows we shall have to speak in another chapter.

Very high roofs and rather low walls are peculiar to the smaller churches, as in the well-known examples at Skelton, near York, and especially to barns, gate-houses, and other Conventual appendages. But the walls were not always low in ordinary churches; not a few being remarkably the contrary, as at Seaton and Empingham, Rutland. The roofs were framed of plain open timber, usually consisting of a series of principal rafters* set closely together, and tied with a collar and braces, or by tie-beams.† Many original roofs of this date remain, but mostly underdrawn and ceiled by modern hands.

Several very fine First Pointed porches exist; but they are sufficiently rare to make their occurrence notable. We may instance Great Grimsby,

* That is, spanning or striding across the wall in the fashion of compasses, the *collar* being a cross bar midway, the *tie-beam* one joining the ends or feet, to prevent them spreading apart, by which the walls would be thrust from the perpendicular.

† See on this subject a paper in the Ecclesiologist, vol. iii. p. 101. Very rarely were parochial buildings vaulted with stone, as in the Norman style. Mr. Bloxam gives an engraving (p. 157,) of Kirkstead Chapel; and the fine chancel of Benington Church, Lincolnshire, exhibits the springing of a stone vault, either destroyed or never completed.

and Ruskington, Lincolnshire; Tansor,* Warmington, Barnack, Glinton, Northamptonshire; Great Casterton, Oakham, Whitwell, and Ketton, in Rutlandshire; Great Tew and Middleton Stoney in Oxfordshire.† The north porches at Wells and Salisbury are very large and fine.

The arches mostly in use throughout this period are seven in number:—1. The Semicircular; 2. the Equilateral Pointed; 3. the Acute Pointed; 4. the Obtuse Pointed; 5. the Trefoiled; 6. the Segmental, consisting of either one or two curves; 7. the Cinquefoiled. Of these, 2, 3, and 5, are the most characteristic of the style; 6. is much used in the interior of doorways, as at Cherry Hinton and Waterbeach, near Cambridge; 7. is sometimes found in piscinas, doorways, and arcades, as in the chancel of Cherry Hinton Church. In small doorways, as those in belfry staircases, the flat-headed trefoiled arch is not uncommon; but this is not, properly speaking, an arch at all.

We now arrive at the era we have called Geometric Middle Pointed, in which Gothic architecture may be said to have attained the

* Bloxam. A very magnificent one at West Walton, Norfolk, is given in Cotman's Architectural Etchings, vol. i. Plate xxxv.

† Glossary of Architecture. The porch at Ketton was built in 1232, according to Rickman, p. 231.

highest point of graceful proportion and luxuriant beauty. This period includes the reigns of the two

SEDILIA AND PISCINA, YAXLEY, HUNTS.

first Edwards, that is, from about 1272 to 1326. It is named from the form of the window tracery, consisting of geometrical figures, circles, trefoils, and triangles, as opposed to the flowing or wavy lines of the succeeding age under Edward III. Here we first find an element which exercised the greatest influence over the art—the introduction of crockets in canopies and pinnacles. Canopies are derived from gables, of which they are a diminutive variety; crockets, (so called from the *crook*, or pastoral staff, from the head of which the earliest form is evidently borrowed, as may be seen on Archbishop Gray's monument in York Cathedral,) are projecting knobs, running up the ridges of canopies and pinnacles,

and terminating in a bunch of leaves, commonly called a finial.* The earliest canopies have no crockets, as in the Chapter House of York Minster. In later work crockets assume an infinite variety of forms, generally having the character of leaves, but sometimes animals, birds, grapes, &c., and always exquisitely beautiful. Hence arose that fine and spiry termination of

* But incorrectly, as Professor Willis shows, Architectural Nomenclature, p. 64. The finial anciently meant the entire crocketed head, or termination of a buttress; the bunch of foliage at top was called the *crope*, or *crop*. Dallaway (p. 60,) says that the crope, or finial, represents a bunch of the plant *euphorbium*. He might just as well have specified the cabbage or the cauliflower. We may here remark the difference between a pinnacle, which rises from a buttress or the angle of a tower, and a pinnacle turret, which flanks gable elevations, especially east ends, as at Ely, Selby, Heckington, &c. Also, that pinnacled buildings form quite a distinct *class* from those with eave-roofs, capped towers, low walls, bold and short buttresses, &c., where pinnacles never occur in any part. Any observer will see how often modern architects err from not having considered this. However, it may be stated that the frequent use of parapet pinnacles was principally confined to Third Pointed churches. In the fourteenth century they were rather sparingly used, except in large and rich buildings. The earliest form of pinnacles is octagonal. The square head arose from the difficulty of cutting the crockets in more than four angles; hence a square head is sometimes set on an octagonal shaft, as in the tower of Caythorpe Church, Lincolnshire. Each face exhibits the principle of a complete niche-canopy, and is in effect the very same thing.

niches, which in early pointed work are little more than plain recesses, as on the Galilee porch and east end of Ely Cathedral, sometimes covered by moulded trefoiled arches, as in the west front at Wells, and sometimes having pedimental heads, as in the north transept of Whitby Abbey. The spiry and spiky outline of niche work is one of the most prominent features of pure Gothic architecture.

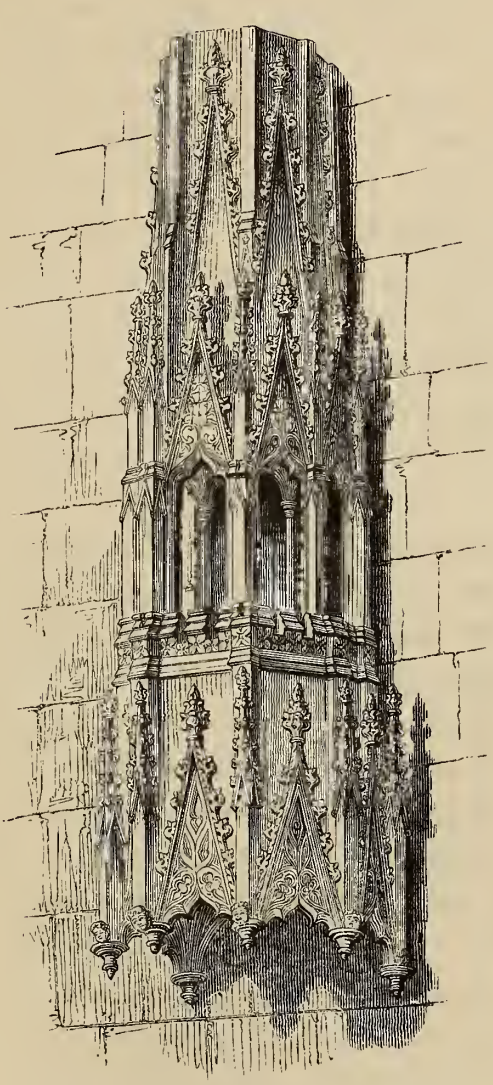
The application of crockets to pinnacles, conical turrets, even lofty spires, and gables, creeping up them like so many living plants,* imparted quite a new character and contour to architecture, and this, the first period of their general use, is by the very fact distinguished from Florid First Pointed, though even in that style examples do occur.

The choir of Lincoln Cathedral,—"the Angel choir,"—which may without fear be pronounced the most perfect structure, both within and without, in England—is the study and model of the Geometric Middle Pointed in its earliest form. The Chapter-houses† of York, Salisbury, West-

* Sir James Hall, in his Essay, ingeniously derives crockets, foliaged capitals, and pinnacles, from the sprouting buds of wicker fabrics, and the green twigs inserted by way of ornament at the extremities of long poles.

† So called, because a chapter from the rules of the order was daily read therein to the assembled monks. (Whewell, p. 190.)

minster, and Wells, are all of this period, and



CANOPY, NORTHBORC', NORTHAMPTONSHIRE.

each of them supplies invaluable specimens of the peculiar and progressive detail. The exquisite

Queen Eleanor Crosses* at Waltham, Northampton, and Geddington, are also contemporaneous. The Abbey of S. Mary at York,—that most melancholy wreck of the very finest house of God that delicate art and tender piety could rear,—belongs to the same era. Stone church in Kent is a very fine specimen of the earliest geometric work. Several details and sections are accurately given in W. Caveler's "Select Specimens." But the chapter-house and vestibule of York Minster, remaining as it does entire, and lately restored in excellent style, is *the* gem of Edwardian Gothic work.

The enlarged size of the windows, which are now of several compartments called *lights* or *days*, divided by monials, and foliated in the heads and tracery, gives a lightness and perviousness to the fabric, which the sombre lancets failed to produce. Now we find one vast window occupying a space which before was usually pierced by rows of lancets ranged side by side in descending progression, and extending its yawning arch high into the gable. Rarely in the preceding style were lancets long enough to reach this entire length in the greater buildings, as we see in the magnificent "Five Sisters," in the north transept of York

* Engraved in Britton's Architectural Antiquities. There were originally ten, of which three only have survived the violence of Protestant destructives.

Cathedral. They were disposed in tiers placed one above the other, as in the east ends at Ely and Rivaulx Abbey.

THE WIMPLE.

There are three marks by which the work of Edward I. can generally be determined. One is a peculiar undercut abacus, differing from the First Pointed in having the scroll-moulding or some variety of it on the edge; another is a label or hood, with a deep circular hollow sunk under it into the face of the *wall;* the third is the well-known dripstone termination or corbel, called the wimpled head-dress.

The flowing, or complete Gothic, besides the peculiar characteristic of its windows already noticed,* exhibits not a few distinctive features

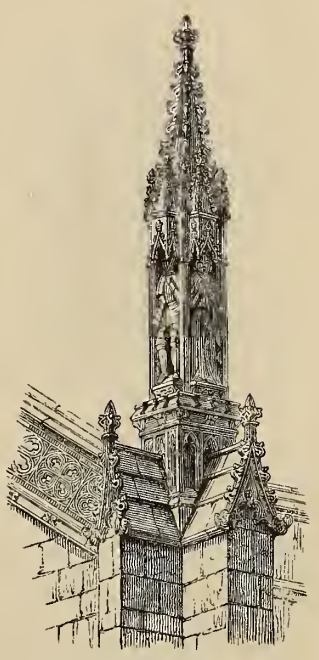
* Flowing tracery, properly so called, is very rare in clerestory and belfry windows. An example of the former is Boston, Lincolnshire; of the latter, Empingham, Rutland. Very beautiful belfry windows of the geometric period occur at Seaton, Rutland, and Threckingham, Lincolnshire. Circular windows are not uncommon in this style, as in the

in its minor details. But the *mouldings* will be found to afford the surest indication of date, since in the geometric age they approach much more nearly to the First Pointed forms than they do in later work. A great profusion of canopy and crocket, niche and arcaded panelling, with the sides shafted, or buttressed and pinnacled; in a word, a general tendency to *pyramidal* rather than *vertical* outline, and withal a singular gracefulness and felicity in the *relative* proportion of parts, to a degree observable in no other style, may be noticed as characteristic of this. The mouldings, in the early part still deep and shadowy, now generally exhibit *softer* * lines of light and shade, and the ogee curve becomes remarkably prevalent in their profile, as well as in arches and projecting canopies. Buttresses are enriched with triangular heads and set-offs, cusped, crocketed, and even pinnacled; with sunken niches, or with deep panels, as in the beautiful examples at Bot-

Tower of Haddenham, near Ely, the gateway at Bury S. Edmund's, Stratford on Avon, and Leek, Staffordshire, (engraved in Bloxam, p. 228.) Also at Kentford and Bradwell, Suffolk.

* It may be stated as a principle that First Pointed mouldings exhibit a predominance of *concave*, Middle Pointed of *convex*, Third Pointed of *sharp-edged* members. The rounds and hollows of the first are smaller and more frequent than those in the second, where very large rolls with fillets two or three inches in width often occur.

tisham, Cambridgeshire.* Parapets are pierced in trefoils,† quatrefoils, or wavy lines, or empanelled, with bold grotesque gargoyles in the cornice, or sejant figures upon the coping, as at Selby Abbey, or with animals scrambling down the eaves or points of gables. The windows and door-jambs‡ are sometimes studded with little bosses or *paterœ* placed at short intervals, particularly a kind of open four-leaved flower; the ball-flower is often thickly strewn upon cornices and arches, and even all over the tracery of windows, as at Grantham; Leominster, Herefordshire; Melton Mowbray; Badgeworth, Gloucestershire; and Clipsham, Rutland. Columns are now



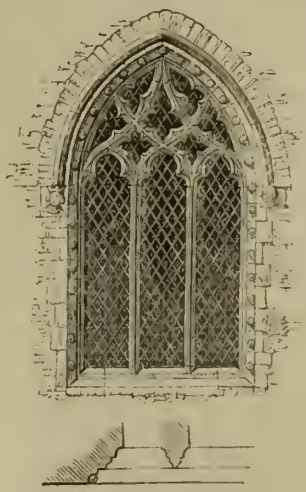
BOSTON, LINCOLNSHIRE.

* Brandon's Analysis, Part 17. There are fine niched buttresses at Redgrave, Suffolk.

† Battlements unquestionably occur in this style, though rarely, as at Northborough, Northamptonshire, the porches at Ketton, Rutland, and Over, Cambridgeshire, and the tower of Billingborough, Lincolnshire.

‡ As in the west doorway at North Mimms, Herts. (Brandon's Analysis, Part 21.)

thickly clustered, the shafts being generally in the form of a roll-and-fillet, but no longer isolated from the central pillar. Very beautiful examples occur at Trumpington near Cambridge.* Capitals are of three kinds; moulded, floriated, and pictorial. At Oakham church, Rutland, and West Keal, Lincolnshire, are series of subjects, such as the Nativity, Annunciation, &c., or the fox and goose, and such-like quaint representations. In many cases, as in the Lady Chapel at Ely, heads, birds, dragons combatant, monks, animals in ridiculous



CLIPSHAM, RUTLAND.

* These are generally arranged diamond-wise. Slender octagonal piers are not uncommon, as at Fletton and Standground, near Peterburgh; and sometimes, as at Utterby, Lincolnshire, the faces are slightly hollowed after the manner of shallow fluting. One of the commonest kinds of complex columns in churches of the fourteenth century consists of four half columns set on a square, the corners of which are just visible between, and are usually worked into fillets or pointed rolls. And it was by drawing out these shafts on the north and south sides into elongated rolls-and-fillets, as at Attleboro' Church, Norfolk, that the parallelogrammic plan of the next style was suggested.

attitudes, are very curiously sculptured ; and they often display immense genius as works of art.

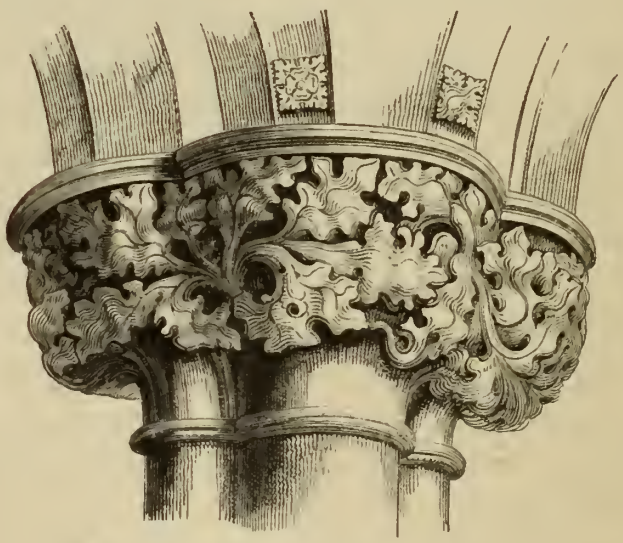
In the Chapter-houses of York and Wells are many extraordinary figures of this kind. "There appears to have prevailed at this period a school of art both in architecture and sculpture, which in graceful design and beauty of execution far surpassed the works of any age, either anterior or subsequent. The origin and gradual development of the school we may trace to the thirteenth century ; in the fourteenth it reached perfection ; while in the fifteenth we perceive a marked decline in sculpture as well as in architectonic art, though somewhat concealed by an increased richness of detail."*

The origin of grotesque sculpture, which prevailed in Christian architecture from the very earliest to the latest age, is one of the most mysterious of the many subjects which it presents

* Bloxam, p. 196. The unrivalled stone screens at York and Canterbury, with their elaborate and delicate imagery, will attest the excellence to which the art of the statuary was carried in the fourteenth century.

for investigation. We believe that emblematic portraitures of virtue and vice, good and evil spirits, the world and the church, were, for the most part, really intended; but that a kind of license for caprice was given in this department to the artists, whose taste was not invariably of the most refined or chastened description.

The foliage of the capitals is profuse, but very different from that of the preceding style. It is



much more crisp, knotted, bulbous, and minute, and entwines itself horizontally or transversely rather than vertically. Before, we had a succulent plant growing upwards, as out of the ground; here we find a garland of oak-leaves thrown round below the abacus. Sometimes we have a kind of fern-leaf, as in the Chapter House at

Wells; or a full-blown flower, as at Morton, Lincolnshire; or a small crisp foliage very minutely wrought, as in the Lady Chapel at Ely.* The octagonal capital is the most common for plain single piers, the circular for shafts and clustered columns. Some capitals of this date have battlements at the top, some have the ball-flower below the bell. But the point of distinction between First and Middle Pointed capitals is this; that the abacus of the latter is generally less prominent to the eye, and is no longer undercut in a dark shadow, but consists of the scroll-moulding, that is, of a cylinder whose lower half is as it were withdrawn, leaving a projecting edge. This moulding is of very frequent occurrence in all Edwardian architecture, whether in labels, string-courses, arch-mouldings, or basements. It is almost invariable in capitals, and is frequently the *only* point by which the date can be determined. It is a very remarkable fact, and one not easily explained, that the base and cap-mouldings of

* Floriated capitals of this age are uncommon in small churches, and therefore interesting when discovered. At Partney, Lincolnshire, and Standground, near Peterborough, there are very elaborate specimens. Some very singular and varied foliage of early Edwardian date, at Slymbridge Church, Gloucestershire, is engraved in the Bristol Society's "Historical Notes," &c. on that church, p. 38. Browne's and Halfpenny's Illustrations of York Cathedral supply abundant and highly elaborate examples.

the *responds*, or half-columns attached to the east and west walls in naves, are generally of an earlier character than the rest.

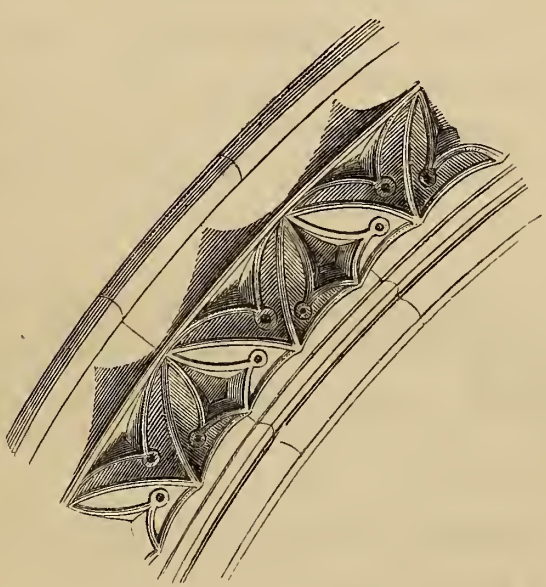
Bases consist of two or three plain roll-mouldings, of which the lowest is sometimes of the scroll-form. But the various profiles cannot be intelligibly explained without diagrams; and the reader is therefore again recommended to refer to the "Manual of Gothic Mouldings." Shafts are no longer detached, and of a different material, but attached or engaged, and therefore built in courses with the wall, and less deeply niched in the jambs.* They are, however, often banded as in the preceding style.† The heads of window lights and canopies were very generally trefoiled, though often cinquefoiled, and in ogee foils. The peculiar process called *double-feathering* was first introduced in this era, though it is more commonly found in the next. ‡ It consists in

* "The shafts do not in this style generally stand free, but are parts of the sweep of mouldings; and instead of being cut and set up lengthways, all the mouldings and shafts are cut on the archstone, thus combining great strength with all the appearance of lightness." Rickman, p. 72.

† The octagonal tower at Old Buckenham, Norfolk, of this date, has banded shafts running up the angles from the basement mouldings. At Empingham, Rutland, the buttresses are thus ornamented at the edges, as in Norman work. The latest example of banded shafts occurs in the piers of the nave at Canterbury.

‡ A monument in East Harling Church, Norfolk, of A.D.

recusping each point, or foliating each foil, by which, especially in larger canopies, as those over monuments, sedilia, &c., great additional richness is gained. An early example occurs in the windows of Swavesey Church, near Cambridge.



DOG-TOOTH, FURNESS ABBEY.

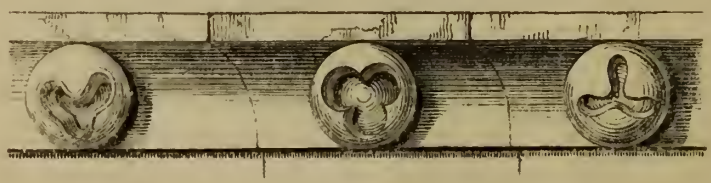
The spandrils of the cusps* are very often filled with sculptured leaves, as in the monument of

1435, has cusps which are *doubly* double-feathered. Many windows of the fourteenth century are doubly-feathered, as the fine west window at Hingham, Norfolk ; and at Red-grave, Suffolk. At Southburgh, near Hingham, there are some beautiful examples of doubly-feathered windows, circa 1340.

* Called *foliating-spaces* by Professor Willis, p. 45.

Sir Roger de Trumpington, at Trumpington Church. The points are sometimes tipped with a ball-flower, or other ornament, as a small head, a *fleur-de-lis*, or a leafy boss.

The dog-tooth moulding occurs, but rarely, in Middle Pointed work, and sometimes in combination with the ball-flower, as on the tower of Haddenham Church, near Ely. It is found in the label of the chancel arch at Haslingfield, near Cambridge; but it is probably confined to



BALL-FLOWER.

the Geometric period. The ball-flower-and-leaf is also generally an evidence of early date.* In

* It is joined with the dog-tooth in the west doorway of Bloxham Church, Oxfordshire. (Bloxam, p. 216.) The ball-flower itself occurs in late First Pointed work. It terminates the label of the south door of Slymbridge Church, Gloucester, (engraved by the Bristol Society in their description, p. 47,) which, like the other details of this building, is of a very unusual kind, probably not earlier than Edward I. It is a curious fact, that the ball-flower-and-leaf occurs in ornamental work known to be of the year 937, and on a capital of no less antiquity, as represented in Mr. Petrie's Ecclesiastical Architecture of Ireland, pp. 242 and 333. Ed. 2.

this case, a kind of creeping stalk is carried alternately over and under each ball-flower. It is most commonly seen in cornices, blocking-courses, and under the overhanging capping-mould of broach spires. The ball-flower is of very frequent occurrence in the fine churches of Rutlandshire. The four-leaved diaper, arranged in a series of small squares, and already described, still occurs, though it entirely vanished before the establishment of the next style. It is rarely found on fonts, as at Ewerby,* and Swaton,† Lincolnshire.

Porches are often very large and richly adorned. Superior examples occur at Heckington, Sleaford, Ewerby, and Boston, Lincolnshire; Yarmouth, Over near Huntington; and Rougham, Suffolk. Not a few are of wood, as at Berkswell, near Coventry; Stretham, near Ely; Yardley, Worcestershire;‡ Bradwell and Aldham, Essex;§ Eversden, near Cambridge; Warblington, Hampshire; and several others mentioned by Mr. Bloxam.‖ In some cases the roofs are of stone,

* Van Voorst's Baptismal Fonts.

† Simpson's Fonts, p. 40.

‡ Instrumenta Ecclesiastica, Part IX.

§ Brandon's Analysis, Part XIV.

‖ p. 220. See also Glossary of Architecture, p. 294, where it is stated that wooden porches are only of one story in height. This is generally true. The wooden parvise at Berkswell is perhaps unique.

supported by straight-sided ribs, as at Careby and Benington, Lincolnshire; and Chacombe and Middleton Chersey, Northamptonshire. *

Doorways were often extremely rich, and on the other hand often perfectly plain. They are either shafted, or with continuous mouldings; the latter is by far the most common in parochial churches. Of these we shall speak more at large in a subsequent chapter; we may mention as splendid examples those in the west front of York Cathedral, where bands of the minutest foliage are carried round between groups of mouldings. Sometimes niches adorn the impost or archivolt, as at Adderbury, Oxfordshire;† and in the cloisters at Norwich. The two side-doorways in the screen of Lincoln Minster are wonderfully rich, and of the most superb design and execution, but they are early in the Geometric period. The doorway leading into the Chapter House at Rochester is one of the finest examples of Complete Middle Pointed work.‡

Among the richest and purest buildings of this age must be enumerated the octagon, with its three contiguous and coeval choir arches,§ and

* These two and others are given by Mr. Bloxam.

† Engraved in Mr. Bloxam's work, p. 216.

‡ It is given with sections and details in W. Caveler's "Select Specimens."

§ The triforium has delicate flowing tracery, and is adapted

the Lady Chapel, and Prior Crauden's Chapel, at Ely. Nothing can surpass the beauty of these, especially of the three choir arches, which are most gorgeously decorated and most exquisitely worked. Much excellent detail also exists in Bristol Cathedral; the nave of York Minster is entirely of this period, varying in its parts from early to late; and we must not omit to mention Bridlington, Guisborough, and Selby Abbeys, Yorkshire; the vast parochial churches at Boston, Grantham, Heckington;* Sleaford, Hull, Navenby (Lincolnshire); the chancel of Hawton church, Nottinghamshire;† the gateways at Canterbury,

in size to the earlier work with which it is connected. This is perhaps the latest example of a distinct triforium, which totally vanished in the succeeding period. In its earliest form it is little more than a repetition of the nave arcade on a smaller scale, as at Norwich Cathedral. The arch was afterwards divided into two smaller compartments by a central shaft, as at Ely. Then the shafts at the sides and centre were clustered, and the space above the latter was pierced, till the light and richly decorated examples at Ely, Whitby Abbey, and Salisbury were produced. Towards the fifteenth century this arrangement degenerated into a mere ornamental parapet for the triforium passage, as in the choir of York Cathedral.

* Between these three and the Redcliffe Church, Bristol, lies the contest for the first place in the kingdom among churches not abbatial, cathedral, or collegiate.

† Published in a magnificent folio volume by the Cambridge Camden Society.

Norwich, Thornton Abbey, Lincolnshire, and Bury S. Edmunds; the naves of Exeter and Lichfield (both of the earliest kind); and, above all others, the queen of Edwardian buildings, S. Stephen's, Westminster—now, alas! to be numbered among the things that are past and gone. The church of Hingham, Norfolk, is a remarkably fine and large specimen of Middle Pointed work throughout; Howden, Yorkshire, especially its Chapter-house, and Patrington in the same county, are also noble edifices of the purest period. Bottisham and Trumpington, near Cambridge, and Dorchester, Oxfordshire, are very good buildings of the earlier part of the style. The chancel at Carlton Rode, Norfolk, is a very fine structure of the same age.

A few words remain to be said on vaulting and wooden roofs. The former, indeed, is of so complex a character, that it is impossible to describe it at length in a small and unscientific work like the present. It is at once distinguishable by its intricate ramifications, though in this respect, and no other, it was even surpassed by that of the next style. But most of the large vaults now remaining, of the ramified kind, are of the fourteenth century. The latest are in the naves of Norwich, Canterbury, Winchester Cathedrals, and the choir at York. Earlier and purer examples are the Lady Chapel, and part of the choir of

Ely, the exquisite vaults at Wells (among the finest in the kingdom),* the nave of York, the cloisters of Norwich. In a few cases, as in York Cathedral and Selby, the vaulting is of wood.

Vaults of this age have been divided into two classes. Of the first, the wide and daring roof of the choir at Lincoln is the best instance. In the later and purer kind, the radiation of the ribs is not directly across, as in the preceding styles, but from the vaulting shafts to the longitudinal rib running along the centre, each bulging bay of vaulting having, as it were, a skeleton frame of diverging ribs, repeated in every space between two windows on each side. "In the second, or late Decorated vaulting, bosses begin to make their appearance to the right and left of the longitudinal and transverse ridge-beams upon the diagonal and intermediate ribs: short ribs, which we may conveniently call *tie-ribs*, connected these with the bosses on the ridge: and by these means simple and elegant figures were traced on the shell of the vaulting. As the Perpendicular style advanced, this kind of vaulting was eagerly practised, and it gradually proceeded from the simple figures on the vault

* The bosses are usually of extraordinary delicacy and variety of design. In fact, they might form a complete study by themselves. Those at S. Mary Redcliffe, Bristol, are exceedingly good, as are those at Wells, York, and Ely.

over the nave at Winchester, to the more complex in the nave of Canterbury, until the tie-ribs wandered aimlessly over the vault, as in the Lady Chapel at Gloucester, and finally all distinctions of ribs were lost amid the gorgeous entanglement which adorns the roof of the Chapter-house at Canterbury." *

Of Fan-tracery vaults, one of the principal characteristics of the latest style, King's Chapel, Cambridge, the cloisters at Gloucester, the Lady Chapel at Peterburgh, S. George's Chapel, Windsor, are the finest examples. These resemble a series of inverted semi-cones, ranged along each side of the building, having their internal surfaces quite covered with radiating panels. Their complex construction is elaborately illustrated by Professor Willis, in his Essay on Vaulting, in the Transactions of the Institute of British Architects.

Timber roofs of this age we believe to be of very frequent occurrence, only it is generally impossible to fix the date from extreme simplicity and rudeness of construction. In fact, the idea of constructing *enriched* wooden roofs was only conceived towards the end of the style, and was very partially carried out. Most early specimens

* Mr. Ellicott on vaulting. Transactions of the C.C.S., Part III. p. 197.

which remain (and these naturally bear but a small proportion to the number of ancient churches), have been underdrawn in later ages, and covered with plaister and whitewash, from their rough and barn-like appearance. It is probable that the construction was generally the same as in the First Pointed age,* though moulded timbers occur in some cases. The roofs of Adderbury church, Oxfordshire,† and Byfield, Northamptonshire, are cited as examples of this kind. We might add a considerable list of the plainer sort, were it worth the while to enumerate them. They are (with few exceptions) of an acute pitch. Wherever a roof is seen, not lower than the weather-moulding on the tower of a

* See the examples in the Ecclesiologist, vol. iii. p. 106.

† Engraved in Bloxam, p. 209. The nave of Hingham Church, Norfolk, has an excellent Middle Pointed roof, of rather rich design. There is also an interesting example at Polebrook, Northamptonshire. Neither of these are of acute pitch. Many good aisle roofs remain of this date, as at S. Cuthbert's, Thetford, and Haslingfield, near Cambridge. The adoption of the curved brace instead of the straight beam, or strut, by giving scope to the pointed arch principle, led the way to a more elaborate and decorative kind of roofing. But this does not seem to occur in churches of the thirteenth century, though modern architects almost invariably adopt the anachronism. The early roofs seem to have been regarded merely as an apology for stone-vaulting, while those of later date were made substitutes for it by their rich effect and ornamental character.

Middle Pointed church, ceiled within in a semi-octagonal form, (and there are hundreds of this sort,) it is pretty sure to be the original one, formed of *principals*, or timbers sloping from the sides to a point in the ridge, with *collars*, or horizontal ties carried across half-way up, *collar-braces*, transversely from these to the principals, underneath the collar, and upright *struts* from the wall-plate to another point in the principals nearer to the foot. *Cornices*, or foot-boards, concealing the springing of the timbers from the top of the wall, were not generally in use till the fifteenth century, when they were often made of great depth and richness.

A perfect Middle Pointed elevation consists of the following distinct parts, taken regularly from the ground upwards, in the order of their construction : the vertical division by buttresses being into *bays*.

1. Basement, a table projecting somewhat further than the superstructure, often weathered off in elegant slopes and most elaborate moulded orders, extending even six or seven feet above the ground, as at South Luffenham and Wissendine, Rutland.

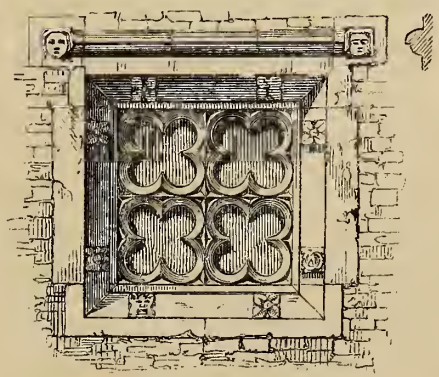
2. String-course, running immediately below the windows, and raised so as to pass over doorways.* This defines the lower stage.

* If a doorway came in the way of a window, the ancient architects did not hesitate either to make the latter shorter, or

3. Windows, above which runs a string-course or cornice-string, set with gurgoyles, ball-flowers, or other ornaments placed at intervals, and terminating the second stage.

4. Parapet, pierced, panelled, embattled, or plain, with moulded coping.

5. The Gable elevation will display delicate *gablets* at the end of the eaves, or an elegant finish, as a head, a rose, a ball-flower, or an animal; details small and unobtrusive in character and position, but always deserving of attention.



WOOTTON, NORTHAMPTONSHIRE.

6. Gable Window, above the larger one immediately underneath, generally circular, oval,

place it higher in the wall, or even to block up a portion of it, as may be seen in the chancel at Chesterton, near Cambridge, and at Hawton, Notts. Such expedients are not defects or awkward bungling contrivances. They are true efforts of genius working on right principles, and as such are highly to be commended. At Tintern Abbey the gable of the doorway rises into the window of the south transept.

square, diamond-shape, or triangular, and foliated or filled with tracery.

7. Gable-Cross, a most beautiful and appropriate termination of the highest point, especially when its floriated arms of almost endless variety are seen in strong isolated relief against the sky, into which it seems to reach. A small turret, designed to hold the host-bell, which in a few cases yet remains, will often be noticed at the highest extremity of the nave gable. This, as at Fressingfield, Suffolk, may itself be terminated with an elaborate cross. Some gable crosses represent the Crucifixion, for many interesting examples of which see "Churches of Cambridgeshire," part V. p. 78.

The plan of churches of the fifteenth century, was rarely cruciform, except in very large buildings, though the fine example of Trinity church, Cambridge, is an exception. Central towers are likewise rare; in fact, the position of the tower is now very seldom any other than at the west end, the nave having spacious aisles, and the chancel not unfrequently lateral chapels, or aisles corresponding with those of the nave. The establishment of Mortuary Chapels, with altars for the celebration of private Masses, materially affected the development of Gothic Architecture. These are of three kinds, or rather in three different positions; in transepts (which do not

appear to have been originally used for ordinary congregational purposes, as with us); at the east ends of aisles; and on each side of the high altar, to the north and south, early examples of which occur at Yaxley, Hunts, and Swavesey near Cambridge. In the thirteenth century it appears to have been the custom to place an altar under an arch on the nave side of the chancel arch, vestiges of which may yet be seen at Castle Rising, and at Milton and Hauxton Churches, Cambridgeshire. These mortuary chapels* invariably contained a piscina, and almost always a niche; more rarely sedilia were added, as at Yaxley and Boston. Even sacristies will often be found to contain piscinæ; and these sometimes occur in the cills of windows, in the seats of sedilia, even towards the west end of aisles, and in fact in almost any wall or corner of a church. They are double for the use of the high altar, single for chantry altars, at least during the thirteenth and fourteenth centuries.

"Church Architecture in England, when it had reached the zenith of excellence, very soon passed beyond it. Simplicity, with its harmonious effect,

* Recumbent effigies will generally be found placed near the high altar; or in transepts or aisles, in or near their Chantry Chapels, to represent, as it were, personal presence at Mass.

was now superseded by an accumulation of minute ornament, which invention and skill were employed to supply, and caprice frequently usurped the place of beautiful construction."* The style commonly called *Perpendicular*, peculiar to this country, has found many advocates and imitators, and many unsparing vituperators, of whom the author of this little sketch would not be thought to be one. With many evidences of debasement, and of departure from the spirit and characteristic genius of true Gothic, in its low arches,† flat gables, battlemented parapets, overloaded ornament, and repetition of meagre and little diversified detail, a style in which such splendid buildings as King's College Chapel, S. George's,

* Dallaway, p. 134.

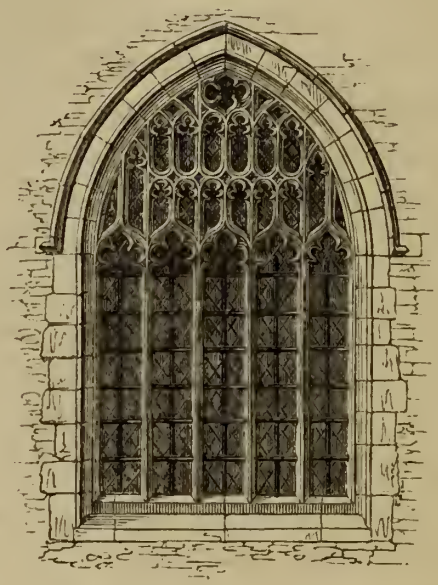
† Gothic architecture was spoiled by the invention of the four-centered arch, as it was reared by the use of the pointed. It arose from the pointed segmental of the previous style, a form adopted when a low archway was required, and there was sufficient abutment to resist the directly lateral thrust, as in gateways. In this case the arch dies into the jamb at an angle. By rounding this angle, we obtain the lesser curve above the capital of the four-centered arch. This is well illustrated by the magnificent gateway of Wingfield Castle, Suffolk, circa 1370, where the outer archway is a doubly recessed pointed segmental one, the inner and opposite, of the same date, is four-centered, the height and bearing of both being precisely the same. Moreover, the pointed segmental is almost as common as the four-centered arch in Third Pointed windows, which shows their close affinity.

Windsor, the unequalled choir of Gloucester Cathedral, the naves of Canterbury and Winchester (early), the magnificent parochial towers of Boston, Louth, All Saints, Stamford, S. Mary's, Taunton, S. Neot's, Huntingdon, with many other fine fabrics, such as Lavenham and Long Melford, Suffolk, Kettering, Northampton, the west front of Beverley Minster, Saffron Walden, Essex, the towers of Gloucester and Canterbury, Rotherham Church, Yorkshire, the nave of Ripon Cathedral —such a style cannot, with common taste or reason, meet with other than very high admiration for its own peculiar and manifold beauties. The most marked feature, as indeed in every other style, consists in the windows, whose great size and vertical tracery-bars readily distinguish this from all others. The heads are filled by smaller compartments,* formed by upright pieces continued parallel from the monials, or mullions. "In all the windows we remark an expanse beyond all proportion when singly placed; or otherwise, that they are crowded into a very inadequate space."† Thus the entire spaces between the buttresses of King's Chapel are nothing but vast window apertures; and clerestories especially, as generally in Norfolk and Suffolk,

* Anciently called *batement lights*. Willis' Architectural Nomenclature, p. 51.

† Dallaway, p. 134.

look like glass houses, from (as Professor Whewell * happily expresses it,) their "diaphanous workmanship." This great size of the windows rendered one or more transoms or cross-bars absolutely necessary for the support of the mo-



EAST WINDOW, SWAVESEY.

nials, just as in First Pointed work bands were requisite for holding erect the isolated shafts. And here, as everywhere, the decoration of essential constructive features, by cusps, embattled crests, or delicate open tracery, imparted great richness together with real and apparent security to the fabrics of large window-frames. These tran-

* Notes, &c. p. 126.

soms are sometimes carried across the monials in two points of their extreme length, as well as across the tracery of the head.

Another striking peculiarity is the panelling of walls on the very same principle, with upright bars, cusped in the head — the substitute for the more ancient and far more beautiful arcade. Immense surfaces, both within and without, are thus ornamented, as in the interior of Great S. Mary's, Cambridge. Even soffits of arches, vaults, battlements, monuments, buttresses (as at Evesham and Boston), and towers were thus enriched, whence it has been proposed to call it the *Empanelled** rather than the *Perpendicular* style. A constant use of borders of quatrefoiled circles in basements and parapets† must not be overlooked. Arches of low form and double curvature, commonly called four-centered, and (in accordance with the shape of these, as the line of coping generally forms a tangent to the window arch in

* "The grand source of ornament in this style is panelling; indeed, the interior of most rich buildings is only a general series of it." Rickman, p. 98.

† At Kettering, Northamptonshire, a band of this kind is carried in a square hood over the western door, and another passes but a little above it. See Billing's beautiful illustrations of this church, Plate xii. In the Norfolk and Suffolk churches a series of rich square panels of very diverse design is carried round the base. Very curious and beautiful patterns occur at Lavenham, Suffolk, and New Buckenham, Norfolk.

all the styles,) low gables, and consequently low roofs, scarcely appearing above the battlemented parapets,* are now in constant use. Nevertheless, it is only in the latest or Florid era that four-centered pier-arches are used, as at Comberton, near Cambridge, and New Buckenham, Norfolk. These continued of the usual pointed form till long after doorways and windows had been generally built with four-centered heads. Doorways, and sometimes, but much more rarely, windows, have square labels or hoods, the spandrils being generally filled with foliated circles and loops. The ends of these labels terminate either in a head or a half figure of an animal, or are supported on slender shafts rising from the ground. A kind of sharp, square-edged outline is observable in the detail, and especially in the mouldings, instead of the softer rounded forms of earlier work.

* The finest proportion for a roof of a church in the styles of the thirteenth and fourteenth century, is the same elevation as the wall from the ground. That is, from ground to parapet or eave, equals the height from eave to ridge. This is well illustrated in the perfectly proportioned chancel of Hawton, published by the Camden Society, and it is also observable in the Chancel of Fen Ditton, near Cambridge. The well known chapel at Skelton, near York, is twice as high in the roof as the side walls. If architects would accept the above rule, it will be found a safe one for effect and propriety. Nothing is a more absurd burlesque on the ancient styles than *detail without the proper outline.*

This is particularly observable in capitals and bases, which are almost invariably octagonal.* The mouldings are shallow, meagre, and wiry; they no longer follow the rectangular faces of the sub-arches, but are arranged on the sloping plane formed by cutting off the square edge of the opening in the wall.† Two very characteristic mouldings are the double ogee, and a wide but shallow cavetto or hollow in the centre of the group, of which it occupies about one third in extent across. This is a most certain and almost universal mark of the style. Buttresses are now of greater height, of more numerous stages, of greater projection in proportion to their width; the plan of earlier buttresses being more nearly a square. The edges are invariably left sharp, whereas they are commonly chamfered in the preceding styles, and the heads and set-offs are usually triangular ‡ or

* In capitals of the Transition between Middle and Third Pointed, it will be found that the abacus is octagonal, the members of the capital below it still circular, as in the preceding styles.

† See this more fully developed in the Manual of Gothic Mouldings, p. 46.

‡ In buttresses of the fourteenth century the *acute* pitch of the canopied heads and set-offs is very striking and beautiful as in the west front of York Minster. These are, generally, filled with panelled tracery. In Third Pointed buttresses the canopies have curved rather than straight sides, and are usually cinque-foiled. The weatherings are rather curved and

pedimental, with rich crockets. Some buttresses of immense projection occur, as in King's College Chapel, S. Sepulchre's, Northampton, and at the east end of S. Michael's, Coventry. In the later period, instead of pinnacles, or rather *finialed* pinnacles, buttresses had flat terminations, forming pedestals for figures at the top, as was the case on the Beauchamp Chapel, Warwick, and S. George's, Windsor, and still is so in the Lady Chapel at Peterburgh. The battlements are often pierced, with cusped and pointed heads, as in the last instance. Crests of the Tudor flower adorn capitals, window cills, and even parapets, as at Yaxley, Suffolk.*

Porches were now built of large size, and generally of two stories in height. The counties of Norfolk and Suffolk contain a great many examples of the most elaborately decorated designs, the panelling in flint masonry being executed with wonderful minuteness and nicety. The porch at Worlingworth, Suffolk, is of great beauty, and

overhanging, than straight graduated slopes. But the absence of the chamfer is the most uniform mark.

* Hints on the Practical Study of Ecclesiastical Architecture and Antiquities, p. 13. It is to be observed that the ornament commonly called Tudor flower is also found, though rarely, in work of the fourteenth century, as on a screen at Shelfanger, Norfolk. Its form is first seen in gable crosses, and the floriated ends of brass crosses of this era.

is covered with monograms and other patterns.* It is very remarkable for having the ball-flower ornament, though of decided Third Pointed character. The roofs of porches are often groined in this style, of which there are fine examples at Great Shelford, Cambridge, Cotterstock, Northampton, Wymondham and Walsingham, Norfolk, Stickney, Lincolnshire,† and at Canterbury Cathedral. Niches often enrich the outer face above or on each side of the entrance archway, as at S.

* An inscription, beautifully done in flint-work, is carried round the porch and clerestory parapet at Long Melford, Suffolk. The crowned M is constantly thus formed in these counties, sometimes alternating with a crowned I H C, as at Yaxley and Rickinghall, Suffolk, and Northrepps, Norfolk. A few porches of moulded brick, of the fifteenth century, may be found, as at Frenze, Norfolk, and Stuston, Suffolk.

† Western porches are uncommon, as at Cromer and Walsingham, Norfolk, Swaffham, Cambridge, and Morton, Lincolnshire. Tower porches are also rare, though very beautiful features. There are fine early examples at Hardingham, Little Ellingham, West Bradenham, Wicklewood, and Sculthorp, Norfolk, where the tower occupies the usual position of the porch, on the south side, and the entrance is through an archway in the lower stage, which thus forms a porch. At East Barsham, Norfolk, it stands on the north side. North and south porches are sometimes found, as at Coton, near Cambridge. Very rarely there is *also* one at the west end, as at Bottisham, near Cambridge. In the octagonal tower at Wickham Market, Suffolk, is a porchway; and at Gumfreston, Pembrokeshire, is a large western porch vaulted in stone. (Ecclesiologist, Part X. new series, p. 153-4.)

Nicholas, Lynn. One very striking characteristic is the frequent use of shields, either plain or bearing arms, which are placed everywhere on battlements, in spandrils, at the ends of labels, and on the bosses of roofs. Angels with spread wings are also peculiar to this style. They generally occur as bearing up brackets or on wooden roofs.

String-courses and cornices are often studded at intervals with diamond-shaped or square leafy ornaments, or pateræ. Figures with musical instruments, ugly grinning faces, animals,* &c., often occur in cornices,† at the heads of buttresses, as gurgoyles, and as corbels supporting the timbers of roofs. A good specimen of a mixed cornice of this kind occurs at Ryhall, Rutland, early in the style.

* At Gresford and Mold churches, Flintshire, the cornices have "a complete chase of cats, rats, mice, dogs, and a variety of imaginary figures, amongst which various grotesque monkeys are very conspicuous." Rickman, p. 96.

† Norman cornices often consist of rows of diabolical (some think symbolical) heads, as at Tickencote and Kilpeck. It seems that a notched or serrated square edge suggested the dog-tooth; the dog-tooth was flattened into the four-leaved flower, which in its turn gave rise to the square or diamond-shaped patera; an ornament remarkably characteristic of the fifteenth century, and frequently carried round arches and between shafts, as at Wingfield church, Suffolk. The origin of the dog-tooth is most distinctly seen in the hood moulding of a Norman arch in the chancel of the Conventual Church at Ely.

Flying buttresses are rare in this century, except at the springing of spires, where they are merely decorative. There are late examples at Fotheringhay and Bath Abbey churches. Spires are usually crocketed or ribbed at the angles; and they do not cap the tower, as before, but rise out of the centre of it.

Wooden roofs were now constructed of the richest and most ingenious mechanical design. A volume might easily be written on wooden roofs alone ;* and it is impossible to do more than call attention to them in the present place. Norfolk and Suffolk are justly celebrated for possessing the most superb examples ; and we may just mention S. Mary's, Bury, Woolpit, Wymondham, Keddington, East Harling, Capel S. Mary, Grundisburgh, and Blakeney, in these two counties. At Willingham, near Cambridge, there is a remarkably fine oaken roof of high pitch, as many of this date are. The general principle of roofs of this age consists in cutting away the middle parts of tie-beams and collars (to speak familiarly rather than correctly), and letting the ends (called *hammer-beams*) project, curved knees or *braces* being morticed underneath them for their

* A work on this subject has lately been advertised by the Messrs. Brandon. The great abundance of oak timber in ancient times was very favourable to the general use of these ponderous structures, the cost of which would now be enormous.

support.* The timbers are generally moulded, and the cornices are very rich, being either fringed with Tudor flower, as at Broom, Norfolk, or sculptured with foliage, fish, animals, &c., as at S. Neot's, or embattled. These roofs have been called *foliated*,† from the form of the trusses, or principals with their hammer-beams projecting, whereby they assume a trefoiled or a cinquefoiled contour, as at Worlingworth, Suffolk.

Roofs of this era are also *coved*, as at Stuston, Norfolk, Fulbourne, Landbeach, Little Shelford, Little Wilbraham, near Cambridge; that is, boarded in a semi-octagonal form,‡ and probably in most instances painted in bright colours, diapered or stencilled; or *embossed*, *i. e.* decorated with surface tracery attached to the boarded panels, as at Wymondham, and in a side chapel at All Saints', Stamford; or painted to represent clouds, sky, and stars, as in the north transept at Empingham, Rutland.§ The eastern bay of the

* These generally exhibit spandrils of light open tracery, of the most beautiful feathery effect. Some fine roofs of this sort are engraved in vol. iv. of Weale's Quarterly Papers.

† Transactions of the Cambridge Camden Society, Part II. p. 105.

‡ A roof of this kind has been lately restored, with its original gilding and painting, in Queen's College Chapel, Cambridge.

§ Some roofs, as Wissendine, Rutland, and Over, Cambridgeshire, have niches and figures carved in the wooden wall-

nave roof, under which the great Rood was placed, was generally coloured when the rest was left plain; a custom perpetuated in the Caroline chapel of S. Peter's College, Cambridge, above the altar. This painting remains unusually perfect at Eye, Suffolk.*

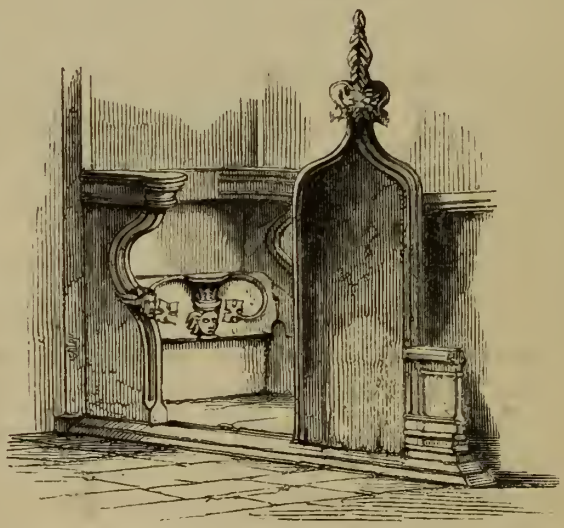
As capitals and bases were octagonal, so octagonal rood-turrets,† with battlements or stone cappings, and even octagonal pinnacles are found. The latter generally have panelled stems, an embattled crest, and crocketed heads. Octagonal

pieces supported on the clerestory corbels. At S. Nicholas, Lynn, there are rich stone niches in the clerestory, and the same occur in the chancel at Burwell, Cambridgeshire.

* At Wingfield, Suffolk, the eastern bay of the open roof is boarded and painted.

† These are rare before the beginning of the fifteenth century. At Harlton, near Cambridge, is one which dates about 1370. Earlier churches sometimes have rood staircases inserted, to the serious mutilation of piers, walls, and capitals. Examples of this occur in the First Pointed churches of Thurlby, Lincolnshire, and Stretton, Rutland. At Barholme, Lincolnshire, and Hauxton, near Cambridge, Norman chancel arches have been mutilated by subsequent erections of roods. The earliest remnants of rood-lofts we have met with are at Great Grimsby, Lincolnshire, and Hull Lavington, Wilts, where the wooden beams have the ball-flower and tooth-moulding combined. The entrance to the rood-loft was sometimes in the aisle, across which a wooden gallery was thrown, traces of which exist in Wingfield Church, Suffolk, and a perfect one remains at Thurlby, Lincolnshire.

fonts are nearly universal; spires, lanterns, even towers, as Coxwold, Yorkshire, assume this favourite form. This was the age of rich wood-work, such as stalls, carved open seats with poppy-heads, screens, and tracery panels on doors, pulpits, and wainscots. In the fourteenth century, with the exception of some few rood-screens, and thesplendid stall-work in the choirs of Ely, Wells, and some other places, carved wood-work is rare; and of the the thirteenth century scarcely a dozen



STALLS IN GRIMSTONE CHURCH.

specimens are known to exist. This therefore is a characteristic of the fifteenth century, to employ timber largely in decorative work, as in roofing and church-fittings, where it was before a subordi-

nate and disparaged material. The detail is essentially the same as that of stone-work, though its use and construction are of course essentially different.*

The marks of transition from the Middle to the Third Pointed style principally appear in the windows and the mouldings. In the former, we observe a singular combination of vertical and flowing tracery, of which an early glimpse appears in the east window of the Lady Chapel, at Ely. The east window of the chancel at Uffington, near Stamford; the Chantry chapel at Maxey, Northamptonshire; the church at Harlton, and the north aisle at Sawston, near Cambridge, have windows of this kind. We must not omit to mention the desecrated pilgrim's chapel, at Houghton in the Vale, near Walsingham, whose windows afford a good illustration of the change of form in the tracery.† The nave

* The importance of considering this fact (which never seems to have struck church-architects some years ago) may be seen by noticing the organ screen at Ely Cathedral, erected by Essex in the last century. Its construction is stone, though the material is wood, and consequently the effect is altogether bad. Similarly the roofs of King's College Hall, and Trinity Church chancel, Cambridge, are of wood coloured to imitate stone, whereas no such vaults could possibly have been built in the latter material.

† An eminent living architect well remarked of this little building, the details of which are of extraordinary delicacy,

of Winchester Cathedral exhibits the earliest traces of the change. It may be useful to observe, that the head-dress of a square form is a certain evidence of the transition, and fixes the date of a building to about the year 1375. The nave and chancel of Ryhall church, Rutland, are of this style, and marked by this peculiar dripstone termination.*

HEAD-DRESS, CIRCA A.D. 1375.

The mouldings are marked by the absence of the wide and shallow cavetto, which is almost universal in the later style. The double ogee, and the wavy† or undy moulding, with or without a three-quarter hollow between the orders or groups, are very frequent. The ball-flower was but rarely used in the transition period, though it may sometimes be found, as in the west doorway at Little Walsingham, Norfolk.

The plan of the columns of this age is of three kinds; plain octagonal; oblong, or parallelo-

that "it deserved to be kept under a glass cover." It is deeply to be regretted that this unique building should continue in a desecrated state.

* It is not often found in brasses, but is seen in one of 1380, at Little Casterton, Rutland.

† See Manual of Gothic Mouldings, p. 40.

grammic, set lengthways from north to south, with the corners hollow-chamfered or moulded *continuously* (*i. e.* round the arch also, without the interruption of an impost,) generally with the double ogee, and a half-shaft bearing the soffit mouldings engaged in the eastern and western faces;*—or, thirdly, four half-shafts set on the angles of a square diamond-wise, as at S. Mary's, Stamford, and Trinity church Cambridge.† The capitals are generally very meagre, and seldom present more than three or four plain angular mouldings. The abacus is sloped off, not *rounded*, on its upper face, and its section frequently resembles the letter S. There is no overhanging and undercut bell; and the form is invariably octagonal. Some capitals of this style

* This plan is peculiarly the mark of the period in the piers of nave-arches, &c. The earliest example of it we have met with is at Wood Ditton, near Newmarket, late in the fourteenth century. Sometimes each cardinal face contains a half-shaft, as at Great S. Mary's, Cambridge. In this case those to the north and south are generally carried up to support (decoratively) the roofs. The filleted shaft is not used in this style. The pillars at Ensham Church, Oxfordshire, circa 1400, are early instances of the oblong plan.

† Or on each side of a square, the angles being hollowed out. This is generally a mark of late work. It occurs at Kettering, (Billing's Illustrations, Plate IX,) at S. Michael le Belfry, York, and at Lindfield, Sussex, (Brandon's Analysis, Part X.) See also the Manual of Gothic Mouldings, Plate III.

are embattled, or crested with Tudor flower, or have diamond-shaped bosses or pateræ above the neck moulding.* Foliage is rare, and generally of a very meagre description. The bases are remarkable for the height at which they commence above the ground, sometimes not less than seven or eight feet, as under the western tower at Ely. The form is usually bell-shaped, the bell being circular like the shaft, and the octagonal form commencing immediately below it.†

The predominant expression in the Third Pointed style is the parallelogram, as seen in panels, window tracery, plans of piers, square hoods, compartments of roofs, projection of buttresses, and details of screen-work. At least there is an absence of the pyramidal form, which in the Middle Pointed strongly prevails, as in arcades, canopies, pinnacle-turrets, spires, roofs, and arches. In the thirteenth century we have the trefoil, or some other foliated outline, as exhibited in almost every minor feature; and in the Norman the circle, as seen in the arches, forms of columns, gable windows, vaultings, and cappings. It would not be difficult to show how in every style the mind of the medieval artists seized upon some

* Some capitals have angels with wings, as the belfry-arch at Great Shelford, near Cambridge, and Wingfield Church, Suffolk.

† See Manual of Gothic Mouldings, p. 67, and Plate XV.

particular form as a leading idea, and adapted their works to it, as a kind of key-note to the harmonies of construction and design.* To take a very few examples: in the Norman style we have the round towers, round apses, round churches, round mouldings, round turrets and pilasters; in the next, the number three in windows, ground-plans, foliage, spandril ornaments, foliations, triplicity of shafts and mouldings, and the like; in the Middle Pointed churches frequent canopies and arcades, and this even in glass, paintings, and brasses; tombs, piscinæ, sedilia, gables, and arches. In the last style we have every vertical line intersected rectangularly to a very remarkable extent; transoms across windows, hoods over doors, square windows, square battlements, square panellings, and even a square-edged contour in mouldings, and square, or diamond-shaped ornaments in the pateræ, the bands of sunken tracery; the very outline of niches becomes a parallelogram where

* Further than this, the Romanesque has the circle combined with the square, as in capitals, plinths, the proportion of towers, windows, doorways, compartments of vaulting, recessed arches, &c. The Gothic styles generally exhibit *the triangle based on the parallelogram*, of which an equilateral nave-arch on tall columns is a representative. And this is Hogarth's definition of beauty of proportion. See Transactions of the C.C.S. Part III. p. 241.

it was before a spiry pyramid, and towers are much more frequently constructed without spires than in any other style.*

It is obvious that the low four-centered arch is much better adapted to the parallelogrammic expression than any other. In windows it allows the tracery bars to rise higher, and furnishes less subordinate or supplementary spaces to be filled up, for which purpose the flowing tracery and the equilateral arch were so well adapted. In doorways the jambs can be carried much higher before the spring of the arch commences. There must have been some such principle at work, by which window heads became quite square, and gables quite flat, and even the foliations in the heads of lights and under transoms omitted, in the latest age; in a word, some influence to depress the pyramidal into the flat, a result which is so universally and so strikingly observable in the pitch of the roofs of the respective styles.

Even to the Normans the low segmental arch was not unknown, as it distinctly occurs in the chancel of S. Mary's chapel, Stourbridge. Its

* Hence also the favourite octagonal form in bases, turrets, &c., because a series of oblong faces is thereby presented to the eye. It will be recollected that *all* towers in the thirteenth and fourteenth centuries are believed to have had, or been intended to have, spires of stone or wood. (Churches of Cambridgeshire, Part III. p. 47.)

occurrence (principally in the interior of doorways) in the First Pointed age has already been noticed. In windows of the fourteenth century it is extremely common, and even the square head is by no means rare; all which shews that there was no more tendency in the flat arch *alone* to debase Gothic architecture, than there was in the pointed arch *alone* to develope it.

The Late, or Florid Third Pointed works are characterised by excessive ornament, as in the chapels of Bishops Alcock and West, in Ely Cathedral; or by a meagre and wiry detail, as at Bath Abbey, and the great tower at Fountains Abbey; by pendents and feathered flying buttresses, fan vaulting, large heraldic figures and shields, by square-headed windows, by the rose and portcullis; by much panelling of buttresses and walls, by domical cappings of pinnacles, by four-centered pier-arches, as at S. Sepulchre's and S. Edward's churches, Cambridge; by continuous arch-mouldings, as at Croyland Abbey, or by their dying into piers and jambs without any projecting capital or impost; by the interpenetration of mouldings, as at King's College chapel, that is, by one member dying into, and reappearing on the surface of another; by more than one embattled transom to large windows; by semi-circular headed windows, as in the Chantry chapel at Barneck church, and the belfry windows of All

Saints, and S. Martins, Stamford; by almost flat wooden roofs, as in S. John's and Trinity College chapels, and S. Mary's church, Cambridge; by very low four-centered doorways, with square hoods and large diamond-shaped returns,* and by panelled soffits of arches, as in S. John's College chapel, Cambridge.

In the towers of this style we notice two peculiarities; one is the character of the masonry, which is of rather large and exceedingly fine-jointed ashlar, so that the whole structure must have appeared, when new, almost as if cut out of a single mass; and the other is the principle of throwing the chief amount of conspicuous decoration into the upper stage, as in the celebrated tower of Magdalen College, Oxford. Another

* The origin of the square hood must be looked for in the string-course which in the thirteenth and fourteenth centuries was stilted in rectangular steps so as to pass above the doorway, which would otherwise have interrupted it; and in this case the arch has in addition its own concentric hood-mould. A good illustration of this is the chancel door of Stanton S. John, engraved in the "Guide to the Architectural Antiquities in the neighbourhood of Oxford," Part III. p. 227. Afterwards the spandrils, or spaces between the two labels, were decorated with shields and foliations. Sometimes a square hood is formed to doors and windows by dropping the side members from a string-course, or cornice, which passes immediately above; but this is not to be commended in practice.

feature is the double belfry window in each face, frequently with a pinnacle carried up between them. Many of the towers of Somersetshire are of this description, and there are fine examples around Stamford and Grantham. A very fine specimen of a tower with these characteristics, of late Middle Pointed date, occurs at Exton, Rutland.

The debased Gothic, a deteriorated style intermingled with Italian details, is in itself so worthless, so late in date, and so uninteresting both in its associations and its architectural effect, that we shall dismiss it with a very brief notice. About the latter part of the reign of King Henry VIII. a love for what is called the Antique began to prevail, and we find in the screen and woodwork of King's College Chapel a decided departure from the Gothic detail, and a great admixture of Italian forms and principles. The novelty was contagious, and spread with fatal rapidity; nor was its career confined to unhappy England, but all the countries which retained their allegiance to the western Church became infected by it. But it was long before the old Catholic style was entirely discarded, and classic temples unblushingly erected, as we see them at the present day. The Gothic still struggled with its adversary, and succeeded in maintaining its ground, partially at least, till about the time of Charles II., when it was finally defeated, and the revived

Pagan gained a triumph worthy of a debased and fallen church, and a spurious literary taste.

Italian doorways, balustered parapets, vases for pinnacles, round balls for finials, window lights without cusps, arabesque sculptures, semicircular arches, and similar violations of the ancient laws of composition, now generally mark ecclesiastical and collegiate buildings. It is worthy of remark, that Italian work first shewed itself in its unmixed form in constructing monuments; and certainly in no respect is its inferiority to pure Pointed design more conspicuous than in this.* Not a few attempts were made, in the partial revival of Catholic feeling in the Laudian or Caroline period, to return to Gothic designs; but the secrets of the art were then lost, and very few buildings possess any real merit if tested by true Pointed principles. Yet some edifices deserve attention as exhibiting a strong perception of ancient laws of designing, combined with total ignorance of detail. There is a church in the immediate neighbourhood of Wells, (Crosscomb is its name,) and another at Apthorp, Northampton-

* One of the latest mural monuments is the magnificent tomb in the Chancel of Hingham Church, Norfolk, (engraved in Cotman's Etchings,) erected shortly before the year 1500. This noble specimen has very recently been cleaned and restored with the most praiseworthy perseverance, by hands little used to so severe a task.

shire, which are highly interesting examples. The tower and spire of Godmanchester church, near Huntingdon, erected towards the beginning of the seventeenth century, might deceive the eye unless very closely inspected. There is also a very tolerable Gothic church at Great Thurlow, Suffolk, which seems to have been built at the close of the sixteenth century.

The period of the Renaissance began with the school of Wren, whose great talents and deserved eminence added much to the popularity of the new method. Many towers were rebuilt in this style, as at Witham on the Hill, Lincolnshire, Long Melford, Suffolk, that at Warwick, and one at Deeping S. James, near Stamford. Some of these carry spires of considerable height; but they mostly have pots, or vases, on the four corners, and baluster parapets.

The puritanical principle of extolling preaching is visibly developed in the extraordinary number of pulpits* erected in the arabesque or Jacobean style. They are often very richly carved; and a close inspection will generally discover a date, varying from 1600 to 1640, (but mostly about 1635,) under the canopied head or on one of the panels.

* By a canon of 1603, every church was ordered to have a pulpit.

Some pulpits* of this date bear inscriptions, as at Yaxley, Suffolk, and Swarby, Lincolnshire, where is written,

"O God my Saviour be my sped,
To preach thy word men's soulls to fed;"

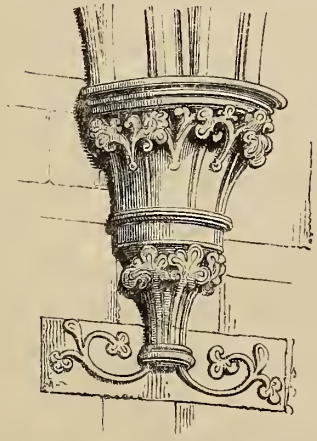
and at Utterby, Lincolnshire,

"Quoties conscendo, animo contimesco."

With pulpits came reading-desks and pues—both thoroughly puritanical innovations. Early pues, after the fashion (and possibly use) of bedsteads,

* Considerable difficulty exists on the subject of pulpits, from the extreme rarity of early examples. Perhaps sermons were usually delivered from the altar steps, until rood-lofts became general; when, (the view and hearing having been thereby impeded) pulpits seem to have been not uncommon, as a great many examples occur of the fifteenth century. Instead of a canopy, or sounding-board, these earlier pulpits had a kind of wooden niche, as at Fotheringay church, (engraved in Barr's Church Architecture, p. 91.) The earliest example of a wooden pulpit we have met with occurs in Fulbourne Church, near Cambridge, dating about 1330. It is engraved with details in the *Instrumenta Ecclesiastica*, Part VII. Many magnificent stone pulpits still exist in the West of England, and some few are of post-reformation date. Very rich and interesting specimens from the churches of Harberton, Chittlehampton, and South Moulton, are engraved in the Exeter Architectural Society's Transactions, vol. i. Part II. At Dinder, near Wells, is a stone pulpit, with the date 1621, and the inscription "Blessed are they that hear the word of God and keep it;" and if we recollect aright, there is a very similar one in Wells Cathedral.

occur at Little Thurlby, Suffolk, Tibenham, Norfolk, and S. Mary Wiggenhall, near Lynn. But the good old open seats were sometimes, though very rarely, set up after the Reformation, as at North Thoresby, Lincolnshire, where the initials of the occupants are engraved on the standards. In this church there is also a remarkable early pue, with a Latin inscription. Galleries were natural concomitants of pues, and some instances of rather early date occur, as at S. Michael's, Coventry.



CORBEL, REFECTORY, FURNESS ABBEY.

CHAPTER IV.

OF WINDOWS.

WINDOWS are a subject of such importance and interest that they deserve a separate and consecutive treatment. In fact their progress and development is one of the most curious features in the study of Gothic architecture, especially as there is no department of the art upon which so much pains and genius were expended, or which affords such striking evidences of the changes and transitions of the styles.

Between the Romanesque and the Complete Pointed buildings there is this one grand distinction; that in the former windows are entirely a subordinate, in the latter a primary part of design. And it was long before the idea of making them a prominently ornamental feature occurred to the Romanesque architects.

Of course the size and style of windows was much affected by the difficulty or facility of procuring glass. And those apertures, as belfry windows, which were never intended to be glazed, will naturally assume a different character to the others. For instance, a shaft or column, dividing an aperture into two compartments, like

the usual Saxon baluster lights, is obviously ill adapted for receiving glass. Moreover those windows which were not glazed, but were necessary for the admission of light and air, must be of small size to exclude the rain and snow.

The use of glass, even in the early Basilicas, where the clerestory windows are of very insignificant size, is probable.* Bede mentions its manufacture for Saxon churches as early as the year 680. Still we may suppose it to have been not universally procurable, and perhaps many church windows were fitted with lattice, or shutters, or some other contrivance to keep out the weather when necessary.

To pierce a wall for the admission of light must have occurred to the builders of the very earliest and rudest churches. And to arch this over, for the support of the wall above, or to erect two sloping stones meeting in a point, or, lastly, to place a flat lintel across, forming a square aperture, are methods dictated by obvious principles of construction. The few examples we have of Saxon windows are of the two first kinds, rudely arched over with rubble, and splayed alike within and without, as at Woodstone, near Peterburgh, or left square-edged on the exterior, as in the belfry

* Hope, chap. x. Glass-making was first introduced into England by Benedict Biscop, according to William of Malmsbury.

lights at Newton, near Castle Acre ; or triangular-headed, which is the commoner form.

Another method was to cut an arch-head out of a single stone, which is common in belfry-windows, or even to work out an entire window by piercing a large block, as in the north wall of the chancel at Newton. That the true principle of the arch was not always comprehended by Saxon builders, might be inferred from the unscientific and insecure sections of the voussoirs in the belfry-arch at Barnack.

Early Norman windows are plain, small, and low, not much more than twice their breadth in height. In the later or florid Norman period they were much elongated, and approached the form of the First Pointed lancet, except that they had semicircular heads. Of this kind is the late Norman triplet in the east end of Threckingham church, Lincolnshire. At the east end of Buildwas Abbey the early short windows have been cut through the heads and carried twice as high at a later period.* Norman double windows, separated by a shaft, occur principally in belfry stages. This method of combining two smaller arches under one larger one is best seen in Norman triforia, as in S. Sepulchre's, Cambridge ; and the space between has only to be pierced to supply the first elements of tracery. A double window

* Potter's Monastic Remains, Plate VI.

of this kind occurs in the ancient building commonly called Pythagoras' School, at Cambridge.

The addition of a shaft on each side, corresponding to, (though perhaps seldom found with,) that in the centre, adds considerably to the effect. And sometimes these are banded in the middle, as at Buildwas Abbey, or have a small square portion left in working them, as at S. Mary's Stourbridge, near Cambridge.

The great thickness of Norman walls made it necessary to splay or enlarge the aperture very considerably, both for better effect and for the more ready diffusion of light. This was always done internally, as it seems to have been the universal rule to set the glass as nearly flush with the exterior wall as possible. Hence we never see in Norman windows any recessed appearance on the outside, and very partially so in First Pointed lancets. But the custom of setting the glass exactly in the middle of the wall, first adopted by the Saxons, gradually gained ground again in the Middle and Third Pointed ages.

Hitherto, it will be observed, neither cusps nor tracery had suggested themselves in the designing of windows, nor any mouldings beyond borders of surface ornaments round the exterior margin, as the zig-zag and beak-head at S. Cross's Hospital, Winchester. The First Pointed architects discovered the elements of the two former,

if they cannot be said to have fully developed them, as they certainly did the last. But they were too fond of the graceful and slender single-light lancet to carry the principle of combining them under a common head of open-work very far. When, however, two or more lancets were placed very close together, forming couplets, triplets, &c., comprised under one hood or arch,* the narrow wall-piers between were gradually reduced to mere monials, or rounded into shafts, or both combined, the one niched into the other, as in the chancel of Seaton church, Rutland; and the vacant space between the pointed upper arch and the pointed heads of the lights was either entirely cut out, or relieved with some aperture, as a plain or foliated circle, or cusped into the form of a quatrefoil.† Some extremely interesting windows of this kind exist in an unknown

* An early method of combining single windows was to recess them within a circumscribing frame, as the couplets in the choir of Netley Abbey, (Architectural Parallels, Part IV.) This example is prior to the further development of piercing the space above the lights.

† Illustrations of all these stages are given in an article by the author on Early Windows, in the Ecclesiologist, Vol. iii. p. 65. Two or more lancets placed together, but not under a common hood, with a circle or other foliated aperture above them, are equally suggestive of tracery. There is a fine specimen of a triplet surmounted by a foliated circle at Sporle, near Swaffham, Norfolk.

appendage to the conventual buildings, a little to the south-east of Peterburgh Cathedral, now forming part of a prebendal residence. Some lancet windows are themselves divided by a shaft or monial, as in the tower of Ketton church, Rutland, and the west front of Ripon Cathedral. This must be distinguished from two separate lancets placed in juxta-position.

Three, five, or even seven lancets, thus arranged and comprised under one hood-moulding or arched head, obviously represent single windows of as many lights; and the shafts usually placed in the jambs of single lancets being still retained, we have almost all the essential requisites of a geometric Middle Pointed window. To increase the number of circles in the head, according to the number of lancets set together, and then to inclose in each circle a trefoil or a quatrefoil, were the next progressive steps. Finally, to reduce the thickness of the tracery-pieces, and to recess the monials, which formerly stood flush with, as being in fact part of, the wall, completed the formation of the windows as seen in the geometric period. Excellent illustrations of this earliest stage of development occur in the eastern wall of the south transept at Ely, and in the east windows of Castle Bytham, Irnham, Rippingale, and Grasby, Lincolnshire.*

* Some very interesting specimens, from Binstead Church,

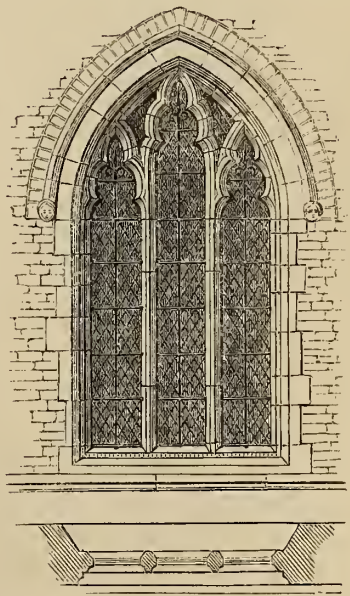
It has been pointed out by Professor Willis, * that cusps, which constitute so essential a feature in window tracery, arose from placing an arch of one shape immediately behind another. This is well and simply illustrated by the head of a lancet light in the tower of S. Mary's Clipsham, Rutland. † Here the window consists of two orders, that is, of two separate planes, the one as it were sunk in the wall behind the other. The outer order has a plain pointed, the inner a trefoil-headed arch. The same may be seen in the windows of Stanton S. John, Oxford. Who

Isle of Wight, are engraved in vol. iv. of Weale's Quarterly papers. Others may be seen in the Guide to the Architectural Antiquities, near Oxford; Part I. p. 12, from Charlton on Otmoor, p. 52; from Hampton Poyle; Part II. p. 117, from Woodstock; p. 162, from Northleigh; Part III. p. 288 from Headington.

* Chapter V. of Architecture of the Middle Ages, where it is shewn that foliation came with the pointed arch. A Norman window in the ruins at Castle Rising is distinctly cusped by pendent knobs projecting out of the arch. This *fretting* of an arch was doubtless borrowed from the Saracens.

† Sir James Hall, whose vegetable theory of the origin of architecture has before been noticed, will have it that cusps were suggested by the curling up of dead bark, dropping from a willow rod or post, (Essay on the origin, &c. of the Gothic arch, p. 33.) False as this notion is, the methods of his induction are exceedingly ingenious: indeed, we know no work, proceeding altogether on wrong grounds, in which so strong a case is made out in support of the writer's views.

does not perceive in this the germ of the trefoliated light? But suppose, instead of a single trefoiled lancet, several trefoiled or cinquefoiled lights are comprised under one arch. Here also we shall realise the elements of cusping, as in an early window at Long Itchington, Warwickshire, and as we find at Grasby, Lincolnshire (p. 169). When two trefoiled lancets are thus combined, the head is often filled with a large open trefoil, as at Trumpington, Rippingale, Lincolnshire, and Carlton Rode, Norfolk; or with a circle comprising a sexfoil, or even a larger number of foliating * points, to the number of eight or ten.



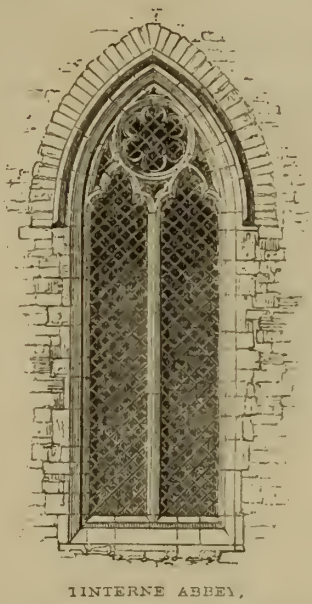
LONG ITCHINGTON.

Of this latter arrangement very fine examples occur in the eastern window of Netley, and the western of Binham Abbey, Norfolk. It is also seen, though on a much smaller scale, in the side windows of the nave of Tinterne Abbey.

The earliest cusps spring directly out of the

* The projecting points are called *cusps*, the arcs between them are *foils*.

soffit, nearly on a plane with the glass, independently of the mouldings of the tracery, and do not rise imperceptibly, as it were, from the sloping sides of the monials, only a little below its exterior face or edge.* Thus they appear to the eye rather as extraneous additions to, than as integral parts of, the monials. At first, these cusps were flat planes, neither pierced nor hollowed out, and with square or slightly chamfered edges. Moreover, they were formed without regard to the jointing of the stones, as may be observed in the windows of the nave of Netley Abbey,† and in the following cut of a lancet window from the neighbourhood of Winchester.



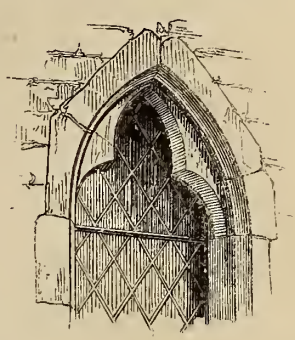
TINTERNE ABBEY.

An excellent specimen of this early form of cusp occurs in the large windows in the north and south wings of the west front of Peter-

* That is, (to adopt the terms suggested in the Author's "Manual of Gothic Mouldings,") the earliest cusps spring out of the *soffit-plane*, the later kinds rise up from the *chamfer-plane*, (p. 19.)

† Sharpe's Architectural Parallels, Part III.

burgh Cathedral. But it was soon found that the size of the cusp admitted of its being pierced right through, though its length and projection was considerably reduced after the Geometric period, when the minute subdivisions of tracery afforded less room. The points of early cusps are either sharp, or (in the case of foliated circles) cut off square, as if forming a smaller circle in the centre; or they terminate in *fleurs de lis*,* or in long spear-like points, almost coming into contact with each other.

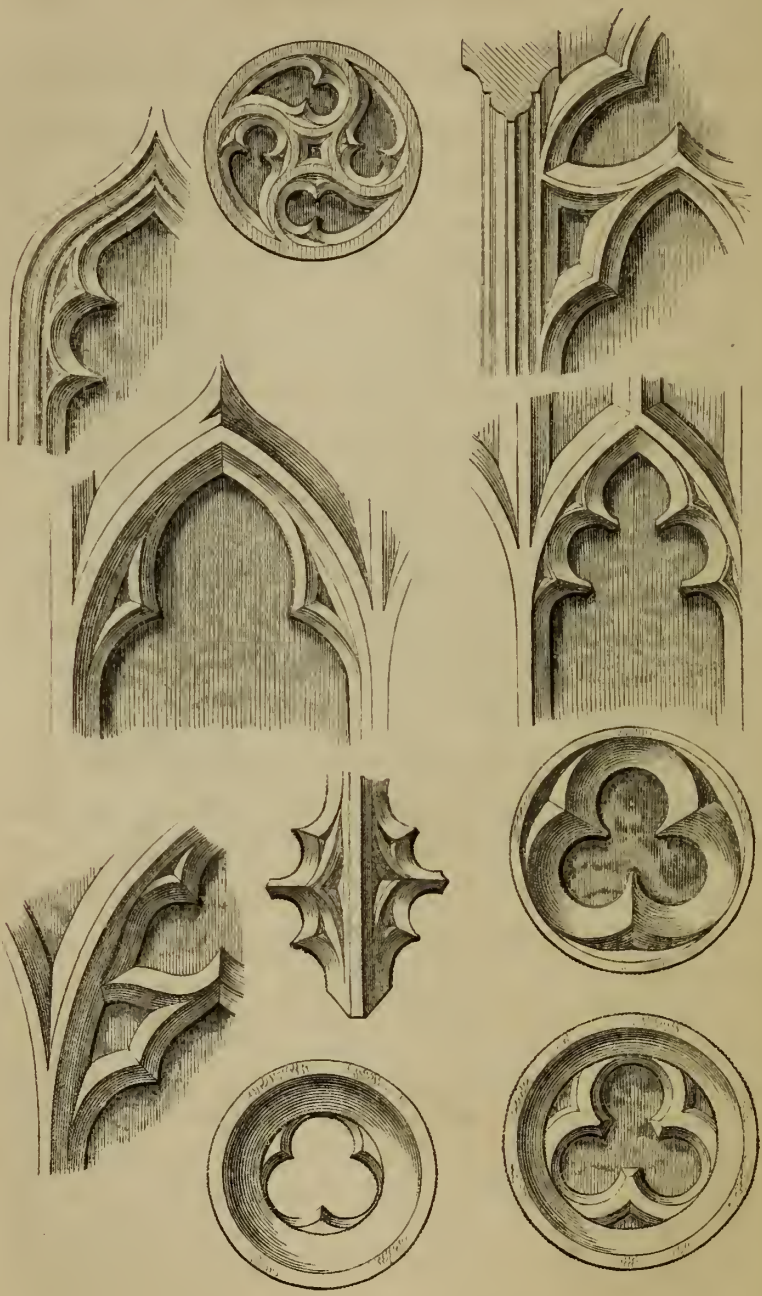


SOFFIT-CUSP.

Lancet windows with trefoiled heads formed by soffit-cusps, as contrasted with such as are trefoiled in the construction of the arch-stones, †

* As in a curious sept-foiled sedile at Fulbourne, near Cambridge.

† The former are properly called *trefoliated*, the latter *trefoil* arches. And it is most important not to confound two very different things, the one being a constructive, the other a decorative detail. Many First Pointed arches are trefoiled, cinquefoiled, &c., the whole course of the deep mouldings following the same sweep, which is hardly compatible with the nature of a *cusp*. In this style some arches are foiled only on one side, especially the lowest on each side of a gable arcade, or one inserted under a bay of vaulting. These generally have bunches of foliage at each point.



SPECIMENS OF GOTHIC CUSPS.

are of the later, or Florid First Pointed era. They occur singly, or, more frequently, combined two and three together under a label with the notch-head termination. Interesting specimens remain at West Deeping, Lincolnshire, Northboro', Northamptonshire, and Fletton, near Peterburgh.

Internally, single or double lancets are comprised under a wide obtuse arch commonly called a *hood,* hollow in the head, that is, running up into the wall higher than the top of the light. These hoods are often supported internally by shafts,* or they have a roll-moulding between two deep hollows carried round, or they are made to die into the jamb, or are corbelled off. Some early windows have a kind of screen before them on the inside, supported by the shafts of a continuous arcade, of which a very fine specimen occurs at Cherry Hinton, near Cambridge. Here the lancets are couplets, and a cinquefoiled arcade rises from long banded shafts, forming a kind of feathered head to each light. There is a similar arrangement at Stone church, Kent.

During the Geometric period, and even in the Florid First Pointed style, very large windows of

* A very beautiful example, trefoiled, with the dog-tooth, and triple shafts, from Hythe church, Kent, is given in Brandon's Analysis, Part XXII.

many lights were constructed. * Thus the great east window of Netley Abbey is of four lights, with an eight-foiled circle in the head, and two quatrefoiled circles at the sides. This window is considered by Mr. Sharpe † to be a genuine First Pointed one. Its composition is certainly Geometric Middle Pointed; but it may be observed that the tracery is remarkably thick and wall-like, and that the monials are constructed in ordinary courses of jointed stone.‡ The large east window of Tinterne Abbey, dating about 1280, is too dilapidated to judge of the form of the original tracery. That at the west end, of the same date, would be called "early Decorated." The east window at Lincoln Cathedral is a fine and perfect specimen on a large scale of the composition of this period. The usual arrangement is to subdivide the tracery into secondary arches, that is, to include two or three lights on each side under an arch of their own, which would form a perfect window in

* Generally from the earliest Norman light to the latest Third Pointed window, there was a regularly progressive increase in the size. In the fourteenth century a window occupied perhaps half the space between two buttresses, or under a gable, while in the fifteenth it filled up nearly the whole of it.

† In his Decorated Windows, where this example is engraved, as also in the Architectural Parallels.

‡ This is also the case in the very singular west window of the Lady Chapel, Ely, of good Decorated date.

itself, if taken out and detached from the larger fabric. Or thus: as two lancets were combined into one two-light window, so two of these double windows were again combined under a still larger arch, making a four-light window, and so on. *

First Pointed windows, in their plainest form, differ in nothing from the Norman, except that the heads are slightly (seldom acutely) pointed, and that they are longer and narrower. Thus, in the transepts of Rivaulx Abbey, the original Norman lights have been converted into pointed lancets simply by rebuilding the heads. We often find such lancets totally devoid of ornament, neither hood-moulding † nor string-course enriching plain apertures in the wall. An interesting

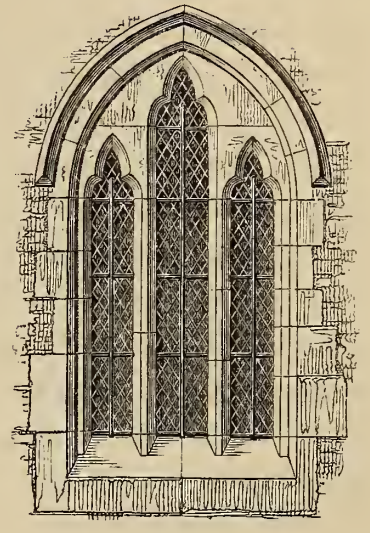
* This was first pointed out by Mr. Rickman, p. 59. The constant design of early geometrical windows is a circle in the head resting on, and as it were carried by, two subordinate arches. And it appears that this circle was foliated even earlier than the heads of the lights. Sometimes, (as at Grantham,) the primary circle is filled up with several smaller ones, or with a series of foliated figures, especially trefoils. In the Transepts at Peterburgh a pentagon is inscribed in each of three circles.

† This feature, which commonly surrounds the head of windows, both within and without, is called by Mr. Rickman a *dripstone*. It may be questioned whether it is not in all cases to be regarded merely as an architectural finish. It appears to be a corruption of the external architrave moulding of the Romans (Willis, p. 126).

(because quite perfect) example of a lancet-lighted and well-buttressed chancel of this simplest kind still remains at Stetchworth, Cambridgeshire. But when two or three lancets are placed together, especially at the east ends of chancels, they are often made extremely rich with banded shafts, floriated capitals, deep mouldings, rows of dog-tooth, and foliated spandril openings. These ornaments sometimes occur in single lancets; but the triplet seems to have generally called forth the highest elaboration, probably from the superior importance of its position.* Most triple lancets have separate hood-mouldings, each light standing some distance apart from its neighbour. When close together, under one arch, they properly become a single window of three lights; especially when *recessed* under a circumscribing frame, as at Coton and Westley Waterless, near Cambridge, and Grasby, Lincolnshire. Some trip-

* Triplets occur (in parochial churches,) principally at the east end of the chancel; but also at the north or south ends of Transepts, as at Whitby, or in the side walls, as at Histon, near Cambridge. The least usual position is the west end, but examples occur even here, as at Peakirk near Peterborough, Little Abingdon, near Cambridge, Potterne and Bishop's Cannings, Wilts. See Ecclesiologist, vol. i. p. 170; ii. p. 65, where we think the symbolical arguments adduced are unsound. Evident reasons, both of construction and propriety, will account for the eastern window being generally superior to the western.

lets have independent tracery in the head of each, as in a fine example at Yaxley, Hunts, where each lancet has a pierced trefoil in the head and is trefoiled below it.* The richer lancets have deep mouldings both within and without, either stopped by the capitals of jamb shafts, at the spring of the arch, or continued down to the cill, or both, as in the beautiful triplet at S. Andrew's Priory Chapel, Barnwell, near Cambridge. One of the richest triplets we have seen is at Castle Rising.†



GRASBY, LINCOLNSHIRE.

Couplets of lancets are not very often found at the east end of chancels. Examples are, Great Casterton, Rutland; Ludborough, Lincolnshire, and S. Mary le Wigford, Lincoln. In this case it is very proper to place a buttress between them.

* See a similar example from Raydon, Suffolk, in Brandon's Analysis, Part X.

† Beautiful specimens of triplets are given in Brandon's Analysis, Parts XI., XIV., and XVII., from Wiley Church, Wilts, Barnwell, and S. Bartholomew's Hospital, Sandwich. Other examples, with measurements, are given in vol. iii. of the Ecclesiologist, p. 72.

All lancet windows ought to have a string-course carried below them both within and without. True it is, this important feature is often omitted in very plain ancient examples; but it is very necessary to effect, and is too often neglected in modern buildings of this style.

In some early three-light windows the monials simply cross and intersect in the head, as at Empingham, Rutland; and this was often the case throughout the earlier part of the Middle Pointed period. Such windows are seldom foliated, but some (as at Melton Mowbray) are made exceedingly rich with ball-flowers. A few examples have shafts in the jambs and monials, as at Carlton Rode, Norfolk.

At Etton, Northamptonshire, all the original two-light windows remain, those in the chancel having a trefoiled, the others a plain circle in the head.

At first, both monial and tracery stood *flush*, *i.e.* on the same plane, with the wall. It was a great improvement to thrust them inwards, and circumscribe them with an outer order of mouldings, as at West Deeping, Lincolnshire. And this was the first step towards recessed jamb-mouldings.*

The trefoil, from its convenient shape for filling

* In Norfolk and Suffolk the monials and tracery of windows, both of the fourteenth and fifteenth century, constantly stand flush with the outer wall, which arises from the difficulty of procuring stone for dressings. It has been

up spandril spaces in tracery, was very much used in the Geometric period. A symbolical meaning has been attached to it, and it seems very reasonable to suppose that the number three was prominently set forth throughout the thirteenth century in many architectural details. We find it exhibited in a very remarkable manner in geometric window tracery. Thus, in the Chapter-house of York Cathedral is a window of *three* lights, *tre*-foiled in the heads, a *tre*-foil over each side-light, and a *tre*-foil in the spandril above. In the centre is a circle containing *three tre*-foiled circles, and *three* intermediate *tre*-foils. Again, the east window of Ripon Cathedral* is formed of *three* compartments, one of *three* lights on each side, and one light in the centre, all *tre*-foiled in the head. The tracery of the side compartments contains *three* foliated circles, and the large central circle has *three* pointed *tre*-foils alternating with *three* circular-foiled ones ; and again in the choir

observed by Sir James Hall, (Essay, p. 50,) that both strength and the free admission of light required monials to have an oblong section in the direction across the wall. But in the earliest examples, before the principle of the monial was fully developed, the section is equal or longer in the line of the wall. This may be seen in a window of five lights at Oundle, Northamptonshire, (engraved in Brandon's Analysis, Part VIII.) The oblong plan of Third Pointed columns follows the principle of monials.

* Sharpe's Decorated Windows.

of Exeter Cathedral, * in a window of five lights, we have *tre*-foiled lights, *tre*-foiled spandrils, *three* small, and *three* large *tre*-foils in the central circle. At Temple Balsall, Warwickshire, † is a window of *three* lights, *tre*-foiled, with *three* circles in the tracery, each inclosing *three* pointed and *three* circular-foiled *tre*-foils. In the cloisters at Norwich are some singular illustrations of this undeniable peculiarity, where we also find *three* shafts in each window jamb. ‡

It is singular that but few windows can be found which distinctly exhibit the transition from Geometric to what is called flowing tracery, the principal characteristic of the Complete Gothic. The difference between the two kinds consists in this; that the former is full of complete and independent curves, whereas in the latter each curve is continuous with, and as it were blended into, some other. In other words, it was a change

* Sharpe's Decorated Windows.

† Ibid. So also at Howden (Ibid.) are three-light windows, trefoiled, with a trefoil above each side light, and a central circle filled with three circular-foiled, and three pointed trefoils.

‡ These are of three trefoiled lights, with three trefoiled triangles in the head. At Besthorpe, Norfolk, are some beautiful windows with trefoiled lights and three trefoils in the head. Many other curious instances of this symbolism in window tracery are given by the authors of the Preface to the Translation of Durandus, p. 91.

from entire circles * to segments of them, each falling coincident with some other, or forming a tangent rather than a secant; and from thence wavy lines of reflex curvature, loops, ovals, and foliated apertures of infinite variety, were introduced. Now as there is no medium between a secant and a tangent (for a line in contact with a circle must be one or the other), so there is properly no transition between the principle of geometric and that of flowing tracery, unless in windows whose tracery is made up partly of one and partly of the other; as in the east window at Fen Stanton, near Huntingdon, Dunmow, Essex, and Wellingborough, Northamptonshire. †

The extreme beauty, as well as the extraordinary number and variety of designs, which are

* Foliated circles constitute the chief feature of Geometric windows. But it is remarkable that these never intersect one another, but are always placed in contact. On the other hand, many of the curves in flowing tracery would, if produced, intersect some others. But the *abrupt* stoppage of tracery lines was avoided as far as possible in the latter, while it does not seem to have been regarded in the earlier style. Flowing tracery seems to have an upward divergence from out of the monials, while geometric tracery is a separate formation, commencing in the head of the window, and joined with the monials as well as could be managed.

† Sharpe's Decorated Windows. We sometimes find geometric windows obviously coeval with others of flowing tracery, in the very same building. The south aisle of Sawston church, near Cambridge, furnishes a curious illustration of this.

observable in the windows of the Middle Pointed age, have justly excited the wonder of all admirers of Gothic architecture. That this was the result of no small genius, and probably of endless experiments, may be tested by any one, who, however conversant with, and in the habit of sketching, Gothic tracery, will try to compose from his own invention ten or a dozen entirely different combinations according to the ancient principle. But some thousands* of patterns still exist in our old churches, no one of which could be called similar to another. The interesting series of examples given in Mr. Sharpe's excellent work, the "Decorated Windows," are but a few select illustrations of the general principles of composition, compared with the countless number of ever-changing forms and combinations which constantly occur to the architectural tourist, and which seem to defy all attempts at classification or description.

Some general principles of Middle Pointed windows may here be laid down.

* Mr. Rickman says, (p. 75,) that "it is very difficult to find two alike in different buildings." The extraordinary pliability of flowing tracery, and the infinity of curves it displays, sometimes quite irregular, are not the least interesting characteristics. The ingenuity often seen in subdividing spaces, and filling up the subordinate parts in harmony with the general design, is truly admirable.

1. That the best proportion in large windows is for the tracery to occupy the same height as the monials. *

2. The tracery should commence just where the label terminates, at the point of the springing of the arch. It is rare to find tracery carried lower than this, as at Rickinghall Inferior and Thelnetham, Suffolk. †

3. The arch, if plain pointed, must fall in with the upright jamb, so that the latter forms a tangent to the curve, and not at an angle.‡

4. The monials and tracery *may* stand on the same plane as the wall, as at Uffington, Lincolnshire, § Over, Cambridgeshire, and frequently in the Norfolk and Suffolk churches. If recessed,

* But in two-light windows the tracery is generally *one third* of the entire length. In larger windows the space occupied by the monials should be *as nearly as possible a square.* If this space is higher than its breadth, the window is probably late in the style. See an example of perfect proportions from Stratford, Suffolk, in Part VI., of Brandon's Analysis.

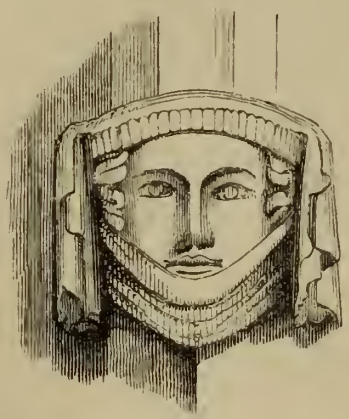
† An example from Billingborough, Lincolnshire, is given in Sharpe's Decorated Windows.

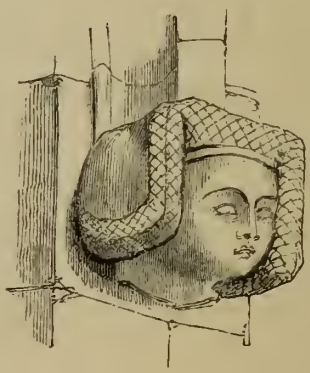
‡ Walker's Historical account of Stoke Golding Church, p. 17. This remark is equally true of the spring of archways above the capitals of columns.

§ This is seen in a three-light window at Charlton Horethorne, Somersetshire, engraved in Sharpe's Decorated Windows. All tracery may be regarded as a screen placed across the

the plain chamfered arch and jamb is perhaps more usual than the richly moulded one.

5. The hood-moulding generally terminates on each side in a head, and is rarely returned continuously, as in the preceding style. Many dripstones of this and the preceding style leave off abruptly, without any termination. But the notch-head, a half-animal, a flowery boss, a ball-flower, a love-knot, a shield, an initial letter, a returned loop, are also found. Specimens are given in Brandon's Analysis, Part XVIII. When hood-mouldings are returned, and continued from





window to window, which is usually a mark of late work, they are seldom carried round the buttresses, but die into them, and reappear on the other side, as if running through them, as at

narrowest point of a large splayed aperture for the admission of light, and therefore nearest to the plane of the outer wall.

Little S. Mary's, Cambridge, and in the chancel of Hingham church, Norfolk. The two preceding specimens illustrate the head-dresses of the reign of Edward III.

6. The heads of the lights in early windows are trefoiled; in later the ogee trefoil is used; in the latest windows of the style the cinquefoil.

7. The tracery should always exhibit a central pattern of geometric outline, as a triangle, circle, or vesica piscis; by filling up which, and the subordinate spaces around it, the design is completed. The absence of this primary and central design is a proof of late work.

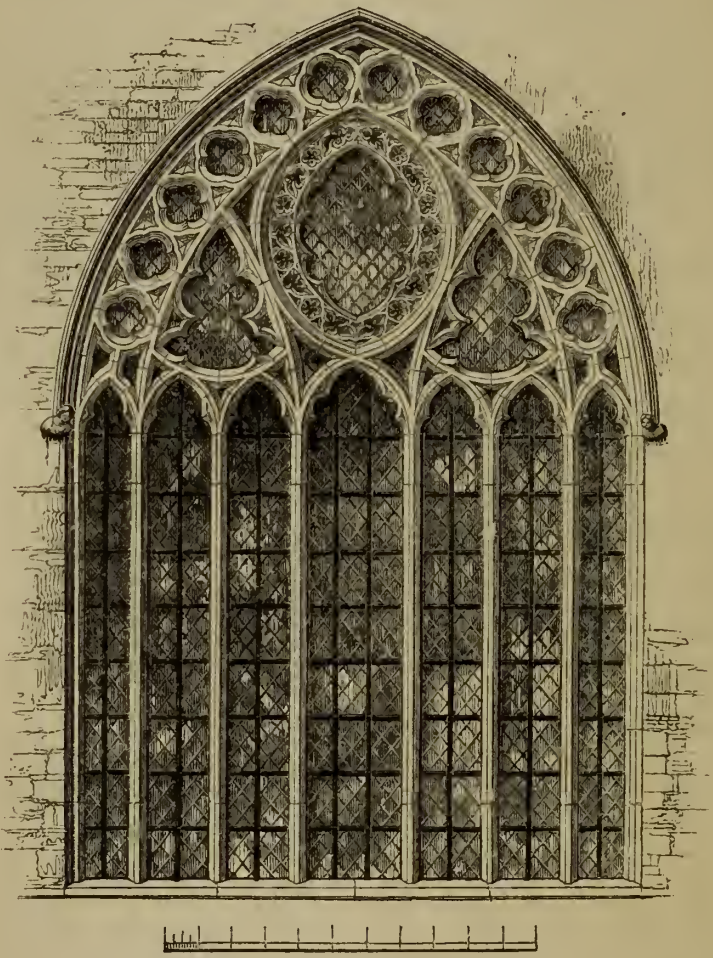
8. Every subordinate or interstitial space should be foliated: the points of the cusps being exactly opposite to each other in the regular figures, or one falling exactly in the centre between two others, in irregular or spandril spaces.

9. Every window of pure date ought to have two planes or orders of tracery, one set of mouldings being secondary or subordinate to the other. When the tracery is arranged entirely in one plane, the window is either late, or of Flamboyant tendency. *

10. The jambs are constructed of stones of *irregular* size and width. The joints of the

* Sharpe's Decorated Windows, (Sleaford.) This remark does not apply to Geometric windows.

form-pieces, or tracery, are always cut in a line drawn from the centre of the curve. *



MILDENHALL EAST WINDOW

The forms of arches, of which there are many in the Middle Pointed period, extensively affect

* Pugin's True Principles, p. 19.

the kinds of tracery. The principal varieties are: 1. The pointed (including the acute or lanciform, and the obtuse or drop arch); 2. the segmental, or portion less than a semicircle; 3. the pointed segmental, or two arcs, meeting in a point, and forming a very depressed arch;* 4. the four-centered, which, however, is almost confined to the Third Pointed style; 5. the straight-sided, also a rare form; 6. the ogee.† Many windows of the fourteenth century have square heads, and we have met with such scarcely clear of the First Pointed style, as at Helpstone, Northamptonshire, and Barholme, Lincolnshire. These are apt to deceive the eye, and will often be found of greater antiquity than they would at first sight appear. At Skipton, near Bolton Abbey, is a square-headed window with very elegant tracery enclosed in circles in the head. Square-headed windows are most common about A.D. 1370.

Some Middle Pointed windows have rich crocketed canopies above them, rising into a finial, as in the Chapter-house at Wells. A beautiful and very uncommon device occurs in the

* These two forms are generally marks of the very purest age. In both cases the hood-moulding is returned some way down the sides.

† As at Brixworth, and some other churches in Northamptonshire. A specimen of this singular form is engraved in Part IX. of the Archæological Journal, p. 99.

east window at Barnack, in which each light has a canopy of its own, whose finial adheres to the archivolt.

Roll-tracery is that in which a roll-moulding is carried round the jambs and outer surface of the tracery. This is common in geometric, and again in Third Pointed windows, but less so in the intervening period.

Net-tracery is a very common form, and has little variety of detail. It consists of a series of loops, resembling the meshes of an extended net, each loop being quatrefoiled. Many large windows of five and six lights are thus filled. A beautiful modification of it occurs in the east cloister of Westminster Abbey.*

Some of the large windows, especially of the geometric kind, have shafts in the jambs and monials,† with floriated or circular capitals. If there are primary or larger monials, these will carry a triple shaft. Some of the richest windows of this kind occur at Heckington and Sleaford,

* Engraved in Caveler's "Select Specimens." An excellent instance of a large window filled with net-tracery, is that at the east end of a chapel adjoining the western gatehouse in the precinct of Peterburgh Cathedral. The peculiarity of this kind of tracery is, that it admits of no central pattern, or principal geometric figure.

† The earliest have *banded* shafts, as in the west window at Tinterne Abbey, and the eastern at Netley.

Lincolnshire, of the flowing period. These, with that finest of English windows, at the east end of Carlisle Cathedral, are given in Mr. Sharpe's work, the "Decorated Windows."*

Not many churches retain all their original windows unaltered and unmutilated. When this is the case, we generally find the designs varied; sometimes alternately, sometimes each one different. At Haslingfield, Cambridgeshire, all on one side are of one form, while all on the opposite are of another. It is clear that variety was intentionally aimed at, and that regularity and sameness had fewer admirers of old than they seem to have at the present day.

Two facts may here be mentioned as curious. In churches of the fourteenth century, the east windows of the *aisles* are often of *earlier*, † that of the chancel of *later*, detail than the rest of the church. Thus, at Sawston, near Cambridge,

* There is a noble east window, similar, and hardly inferior to that at Heckington, at Redgrave, Suffolk; a very fine Middle Pointed edifice.

† So in the north aisle of Dorchester church, "the east window, if taken by itself, might be considered Early English; it has three foliated circles in the head, and its mouldings, which are rather singular, differ much from the rest of the windows, but there can be no doubt of its being built at the same date." Account of the Abbey church of Dorsetshire, published by the Oxford Architectural Society, p. 17.

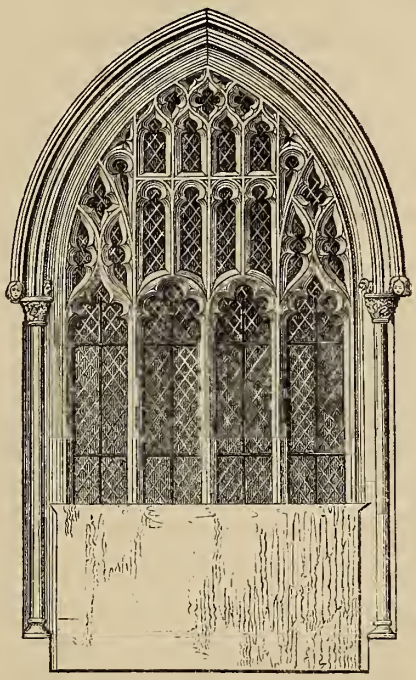
Deeping S. James, Lincolnshire, Kidlington, Oxford, and Winfarthing, Norfolk, the east windows in the south aisle are geometric, while the rest have flowing tracery.* Again, at Over, near Cambridge, the chancel is Middle Pointed, the east window Transition to Third Pointed. Perhaps chancel-windows were usually finished last. Other instances of these peculiarities will readily occur to an observer.

The Transition from the Middle to the Third Pointed is very clearly defined. It is well known that the characteristic of the latter is the perpendicularity or vertical position of all the bars or *form-pieces*† of which the tracery is composed. In windows between the two styles, we find some lines retaining the wavy form, others assuming the vertical. This may be noticed in the large though badly designed east window of the Lady Chapel, Ely, and in a great many churches in

* But the two windows at the east ends, and in the north and south walls adjoining them, of aisles, are very often of later date, and larger size, the insertion having been made on account of Chantry chapels being formed in these positions. It may be remarked that some aisle-windows are set under internal arches supported on columns, after the fashion of nave-arches, as at Attleborough, Norfolk. In naves it is sometimes difficult to say whether these were real aisle-arches subsequently blocked ; but in this case they are generally visible from the outside.

† Willis's Architectural Nomenclature, p. 48.

various parts of the kingdom.* Third Pointed windows are much larger and more closely set



FRESSINGFIELD, SUFFOLK (INTERIOR).

than in the preceding style, arising perhaps in great measure from the extended use of stained glass. The addition of a transom, or cross-bar

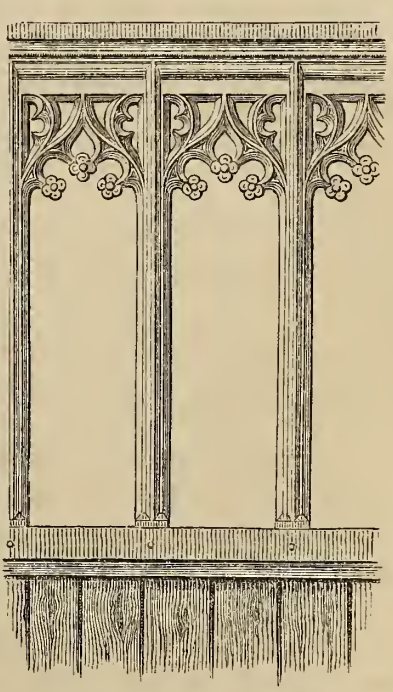
* The author is of opinion that Perpendicular tracery was in common use as early as 1370, and was not unknown previously to the era of William of Wykeham, who has been considered the inventor of the Third Pointed style. Many churches have mixed *Decorated* and *Perpendicular* windows where it is impossible from the minutest examination to assign any difference of date ; for instance, when the nave has

midway, forming as it were upper and lower tiers of lights, each with foliated heads, is a marked characteristic of this style, being rather rare, though not by any means unknown, in the preceding. * It was introduced for the purpose of supporting the long and slender monials under the great weight of the thick and closely leaded glass. The smaller tracery-bars, or super-monials, divide

no aisles, and one wall has one kind, the other the latter, as at Burgate, Suffolk. At Rickinghall, Suffolk, is a window which must be considered a prodigy in Ecclesiology. It is of five lights, with regular Perpendicular tracery, yet from its details it is unquestionably coeval with the other Early Geometric windows in the same fabric, of the age of Edward I. or II. This is certainly a startling fact. The east window at Wingfield, Suffolk, is clearly coeval with the flowing tracery windows on each side of it, though it has vertical tracery. At Fressingfield, Suffolk, a similar window has internal shafts with pure Decorated foliage, apparently about 1360, but with tracery principally vertical. The occurrence of the transom may now be generally noticed, which is rarely found in pure flowing windows, though early examples occur, as at Dry Drayton, near Cambridge. Some windows have transoms subsequently inserted, of which there is a curious specimen in the south transept at Wissendine, Rutland. At Over, near Cambridge, the late Decorated windows have transoms of pierced tracery. At Swanton Morley, near Dereham, is a beautiful doubly-feathered window with traceried transom, of late Decorated date.

* The transoms in Middle Pointed windows are generally plain, while in the next style the lights are almost invariably foliated underneath it.

the tracery into compartments half the width of the lights (anciently called *batement-lights* *). These are generally trefoiled, while the principal lights below are cinquefoiled. The cusps are either sharp at the points, or (more usually) the foils being more than a half-circle, a kind of diamond-shaped, or blunt wedge-like end, terminates the cusp just where the point begins to be widened between two foils. These cusps rise out of the sloping side, near the surface of the monial, and they are not pierced through, but have a triangular hole sunk in them. Neither do they project so far as the earlier cusps, or, like them, admit of being moulded; † a plain hollow chamfer being the usual finish. In wood-work, the cusps of this period are very commonly ornamented with a small circular knob or flower. Double-feathered



PARCLOSE, SHORNE CHURCH, KENT.

* Willis's Architectural Nomenclature, p. 51.

† The cusps of Middle Pointed windows often take part

cusps sometimes occur in windows, as at Histon, near Cambridge, but by no means frequently.

The four-centered arch is perhaps the commonest form in Third Pointed windows, especially in the Tudor or Florid period. But large windows set under gables have generally the ordinary pointed arch. Some of these, as at the east or west ends, or in those of transepts, * are of a vast size, and consist of as many as nine or ten lights. The great east window in York Cathedral is perhaps the finest in the kingdom, though not quite so large as that at Gloucester.† The subdivisions of these great windows by minor arches in the tracery‡ is generally effected by primary monials, of considerably larger size and projection than the secondary series, which carries the tracery in its plane. The mouldings of both these monials

of the mouldings of the monials, as at Bottisham, (Brandon's Analysis, Part XXII.)

* In these positions the original windows of earlier buildings have generally been removed for insertions of the fifteenth century, the gables being at the same time lowered and the parapet embattled.

† The York window is seventy-six feet high by thirty-two wide. That at Gloucester is seventy-nine by thirty-five, and contains nearly four thousand square feet of stained glass. The cost of the latter was one hundred and forty pounds. (Notes to Bentham's History of Ely, p. 32.) It would now cost about five thousand pounds.

‡ This peculiarity has been noticed as characteristic of geometric windows. It is less frequent in flowing tracery.

fall in with corresponding planes of mouldings in the arch and jambs. The principle alluded to may be seen in the great west window of King's College Chapel. Sometimes even tertiary monials occur. In these cases the primary are very heavy, and they are occasionally supported (decoratively at least) by small buttresses rising from the cill, which may be seen in the east window of King's Chapel, and in the western of Gloucester Cathedral.

It would be a hopeless task to explain all the gradations of form and composition in the tracery of this period. We may class most of the varieties under three heads :—

1. Transomed tracery, where a horizontal bar, generally embattled, is carried across the whole or a part of the window head.

2. Plain super-mullioned,* when a tracery-bar rises from each monial (or mullion) and from the crown of the separate lights.

3. Compound, when divided into secondary arched compartments by larger or primary monials.†

* It is a peculiar mark of the latest work to carry the tracery-bars above, or the monials below, a window, as a continuous panelling. The former may be seen at Walden, Essex, and the Beauchamp Chapel, Warwick ; the latter in King's College Chapel, and S. Edward's Church, Cambridge. At Whittlesford, Cambridgeshire, the sedilia are formed by mullions carried below the cill of the window above them.

† These arched compartments sometimes occupy *less* than

In super-mullioned windows the tracery-bars are sometimes expanded midway into open loops; in other words, a double tier of batement-lights is formed, as in the east window of Swavesey church, Cambridgeshire, in page 130.

We cannot conclude this subject without extracting the eloquent words of a well-known writer, from an article on the Philosophy of Gothic Architecture in the English Review.*

"In the history of Gothic windows the progress of this principle (the 'struggle for unity') may be traced in completeness. It commenced operation the moment that the single, round-headed light, simply perforated in the wall, had expanded, either for ornament or use, into a double-headed window, divided by a pillar, of which there are many specimens in our Norman buildings, and even in the Early English. Plurality was thus

half the window, in which case the central light is super-mullioned and transomed in the head, as in a window from S. Peter's Oxford, (Bloxam, p. 263;) sometimes *more*, in which case the two secondary arches cross and intersect each other above the central light, as at Ashbourne, Derbyshire (Bloxam, p. 263). This is graphically explained by Rickman, p. 90. We may observe that Third Pointed windows not unfrequently have *internal* jamb-shafts, but very rarely do they occur externally. Some windows will be found in which the tracery has been entirely altered in later times, the window-frame remaining of the original and earlier detail.

* No. IV. p. 417.

introduced in perfect accordance with the essential character of Gothic. Two parts were formed; and the mind, which cannot rest satisfied with plurality, (?) endeavoured immediately to reduce them into one. How was this to be effected? One mode strongly suggested itself. The artist threw over both the twin arches of the window one larger arch embracing them both. He thus presented, to catch the eye, one grand external figure, within which the others were sunk and lost, (?) and so far attained his purpose by effecting what may be termed *the unity of inclusion*, as one ring fence gives unity to the fields of an estate, and a common boundary-wall makes many families and houses parts of one city.

"But this was not sufficient. Between the great arch and the two smaller ones, was included a space lying, as it were, shapeless, and bare, and uncultivated,—a sort of waste, which seemed to have no connection with the other portions of the figure, and which required to be filled up with some corresponding details. The window still wanted another kind of unity, which may be termed *the unity of completeness*. The included surface was not filled up. It presented a blank, on which the eye rested with disappointment, and longed to occupy it. And how was this attempt to be made? By recurring first to a third kind of unity, which has been mentioned before,

the unity of repetition, by which, in a body composed of many members, the whole number are preserved from discordance or incongruity by repeating in each portion one and the same type or figure. Upon this principle the artist took the form of the original single light, * and introduced it into the vacant space. A specimen of this stage of the transition may be seen in the tower of S. Giles' church, Oxford, and is a remarkable illustration of the fact. Still this third window failed to occupy the whole space: corners were left and blanks, irregular and unconnected; and, for a time, the artist endeavoured to fill them up with other apertures, some circular, some irregularly curved, some elliptical. And when even these could not be fitted accurately into the space, sculptures of heads and leaves were introduced, as if in despair, and with a want of ingenuity which later art repudiated; when, in its perfection of skill and purity, it refused to employ any ornament which was not intrinsically and fundamentally useful. Beautiful as the specimens are of this description in the Early English, as in the windows of the Chapter-house of Christ's church, Oxford, we must not lose sight of the grand principle of Gothic and of all true art, and admire them in themselves. Ornament merely for the sake of ornament, for which no reason

* We doubt the correctness of this as a general statement.

can be assigned but that of pleasing the eye, is not worthy of a grand design.

"To effect more perfectly the occupation of the whole space of the window with an uniform framework, the artist next introduced a regular tracery in the whole of this upper compartment. He drew geometrical figures, circles, and triangles and ellipses; and adjusted their ribbings and outlines till no bare surface was left uncovered: and this is the first stage of the Decorated English; beautiful in itself, as compared with former tracery, but still deficient in another species of art, which may be termed the unity of continuousness. The upper geometrical tracery was connected with the lower mullions only by juxta-position: they touched, but did not flow into each other. There were still two distinct compartments, though each was filled with tracery: and the next effort was to meet and fuse these into one. From the central germ of the upper portion filaments were therefore thrown out, curling down into the lower arches; and at the same time the lower arches shot themselves up to meet the descending lines. But the attempt was vain: no perfect unity of organization can be developed from two centres. And till the upper centre was abandoned, and the whole process of crystallization was carried on continuously from the lower limbs, the nisus or struggle for unity

was baffled, and only produced beautiful abortions. But with this abandonment the effort took effect. All the trunks of the mullions, springing out of one base, rose up to a certain height, and then shot themselves out into ramifications of the most intricate and delicate net-work, exhibiting a variety of combinations which baffles enumeration — the branches climbing and twisting one into the other in a maze full of entanglement, yet without confusion; and the whole composition, in its utmost licence and seeming extravagance of fancy, capable of being subjected to strict and inviolable laws of primary truth."

LANCET, GREAT CASIERTON, RUTLAND.

CHAPTER V.

OF DOORWAYS.

The various kinds of Doorways may be classed under the following heads :

1. Shafted doorways, where the section below the impost is different from that above it, *i.e.* the jamb from the arch.

2. Banded, where the section is the same, with a projecting impost moulding at the spring. *

3. Continuous, where there is no such impost.

4. Discontinuous, where the arch-mouldings die into the jamb at the impost, or spring of the arch.

5. Foliated, where the arch is trefoiled, cinquefoiled, &c.

6. Canopied, where a projecting gable or crocketed and finialed hood-moulding is carried over the archway.

7. Double-arched, when divided by a central shaft, or when a lower and smaller archway is set under a wider and higher one.

8. Panelled, when the jambs, archivolt, or

* See on this subject Professor Willis's remarks, p. 31, &c.

soffit contain niches, panellings, or sunken tracery work.

9. Spandril doorways, when the hood-moulding is of a different shape from the arch, as in the square-headed Third Pointed examples.

Shafted doorways are almost invariable, (at least the exceptions are rare) in Norman and First Pointed examples. The number of the shafts varies from one to four or five, or even more, in each jamb, and the arch-mouldings are abruptly stopped by the capitals. In Middle Pointed doors the outer mouldings are frequently continuous, while the inner side has a shafted segmental hood, as in the west door at Trumpington.*

Discontinuous doorways are generally of Third-Pointed date, but examples occur of the fourteenth century. as at Overstrand, near Cromer. At Besthorpe, Norfolk, one kind of mouldings dies away at the impost, while the jambs have another kind. Foliated doorways are very elegant, though by no means of common occurrence.† The trefoiled head is found in the west front of Byland

* Third Pointed doorways have generally a shaft bearing the soffit mouldings, the rest being continuous ; while exactly the reverse is the case in First Pointed. Manual of Gothic Mouldings, p. 56.

† The unrivalled First Pointed doorways at the west entrance of Ely Cathedral are very richly foliated with flowery

Abbey, in a Norman door at Nately, Hants, and in several of Middle Pointed date. There are instances at Elsing, Norfolk, Yaxley, Hunts, Hunstanton, * Affpuddle, Dorsetshire, † Dunchurch, Warwickshire; and of multifoil Third Pointed at Ryhall, Rutland. A beautiful feathered arch of this sort occurs in Maxey church, Northamptonshire, opening into a chantry-chapel.‡

Canopy doorways occur in Transition and First Pointed work, where the doorway, for the sake of being more deeply recessed, is set in a quasi-porch, or projecting pilaster, terminated by an acute gabled head. Such doorways occur at S. Giles', Cambridge, (Transition,) at Skelton, near York, Kirkstall Abbey, Grantham (First Pointed), the Norman Tower, Bury S. Edmunds, Adel, Yorkshire, and Sempringham, Lincolnshire.§ Later than this we find crocketed

cusps. The very fine trefoiled west doorway at Warmington, Northamptonshire, is engraved in Part XXIII. of Brandon's Analysis.

* Engraved in Cotman's Architectural Etchings, vol. i. Part II. Plate xxvii.

† Engraved in Barr's Anglican Church Architecture, p. 34. Ed. 3.

‡ There is a fine trefoiled First Pointed doorway at Wrangle church, in Holland, Lincolnshire, engraved in Morton's Lincolnshire Churches.

§ The usual proportion of Norman doorways is about two

canopies, especially in Third Pointed doorways, as at King's Chapel. At Milton Church, Kent, is a fine specimen with panelled gable.*

Double-arched doorways are of a very fine effect, though rather rare. At Empingham, Wissendine, and Oakham, Rutland, are fine examples. In these cases there is a lofty moulded arch carried high above the actual doorway, and sometimes the space between the lower and upper arches is pierced with tracery. Double doorways with central division are not uncommon in the First Pointed style, though very rare in the Third, as at S. Margaret's Chapel,

squares in height, the same as that of windows. (Rickman, p. 48.) The excessive depth of mouldings in First Pointed doorways, sometimes extending several feet in the section of the archivolt, caused the *outer* lines to become nearly semicircular when struck from the same centres as the *innermost* mouldings, or the soffit, which was generally formed on an equilateral triangle. If the outer moulding is made equilateral, and the inner lines successively struck from the same centres, the last or inmost will be excessively acute, or a lancet arch.

* Engraved in Brandon's Analysis, Part XII. Mr. Petrie, in his Ecclesiastical Architecture of Ireland, p. 209, Ed. 2, gives a sketch of a doorway with a rude pointed canopy and chevron ornaments from a round tower near Kildare, probably earlier than the year 800 ; and in p. 285 is a more perfect instance, circa 1100. The dividing shaft is either single, as at Peterburgh, or clustered, as at Ely ; and the space immediately above is generally pierced with an ornamental aperture, as a quatrefoil, or Vesica Piscis.

Lynn. A double foliated doorway of this kind exists at S. Cross, near Winchester,* and in the Chapter-house, Salisbury.

Panelled doorways may be illustrated by the fine Erpingham gateway, at Norwich. This class includes all such as have pendent niches or sculptured figures in the jambs. Such is the famous doorway leading into the Chapter House at Rochester.† The beautiful western doorway at Cromer comes under this head.

A great many examples of very ancient wooden doors still exist‡ and not a few of Norman date, which may be generally distinguished by rude and heavy iron work. At Castor, Northamptonshire, the Norman doorway still retains its original door, with lock and even key. Round the outside edge an inscription is carved, "Ricardus Beby, Rector ecclesiæ de Castre, fieri fecit." Now over the chancel door of this church is an inscription, stating its dedication in the

* Engraved in Barr's Anglican Church Architecture, p. 136. Chapter Houses seem generally to have had double doorways, as at Wells, Tinterne, York, &c.

† A singular kind of doorway, very common in Lancashire, generally of the seventeenth century, deserves to be mentioned. It consists of a fantastic and often ungraceful kind of pendent or graduated foliations, of very curious detail, which is scarcely capable of description. The date, and initials of the builder are commonly sculptured over the centre.

‡ Rickman, p. 58.

year 1124. But we know that in 1133 Richard, Priest of Castre, took the habit of Monk in Peterburgh Abbey,* in the beginning of the abbacy of Martin de Bec. This therefore was but a few years after the dedication, and coincides with his tenure of the said Rectory.

The great western doors of Peterburgh Cathedral are the original ones, and exhibit the toothed moulding on the interior framework.†

We may remark, in connexion with this subject, Professor Willis' classification of shafts, which is as follows.

1. Bearing-shafts, which wholly sustain a weight, as when placed in the middle of a doorway or window.

2. Sub-shafts, which bear a sub-arch, or one projecting from the soffit.

* Gunton's History of Peterburgh, p. 277.

† These venerable doors are of course generally made of oak. But in the case of two very ancient doors, both covered with iron scroll-work—those in the Chapter-House at York and at Sempringham Abbey church—we have been surprised at finding the material *deal*. The exquisite enrichment, by tracery, niches, figures, and crocket-work, of Gothic doors might alone demand a separate chapter. A great many good specimens still exist, some of which are given in Brandon's Analysis. One of the most beautiful we ever saw is that which till lately stood in Bishop Alcock's Chapel at Ely, whence it has lately been removed, it not having originally belonged to that place. A very beautiful traceried door is also lying useless in the Chapter-House at Peterburgh.

3. Face-shafts, sustaining arches which have their *back* united to the wall, and which stand prominently against the line of walling, as in an arcade. But these are of infrequent occurrence, except in the latter case, where they also perform the office of bearing-shafts.

4. Edge-shafts, which support arches whose outer face and soffit only are visible, the other two sides being engaged in the wall. Thus the shaft in the jamb of a Norman window (see p. 47) is an edge-shaft.

5. Nook-shafts stand in an interior angle or recess, as in the jamb of a Norman doorway, or a wall-pier. The various kinds of shafts are seen in close combination in the triforium of the choir in Norwich Cathedral.*

In the larger mouldings of windows and doorways, a small *quasi-base* was sometimes worked at the lower commencement, but without any corresponding capital. This occurs in several windows early in the fourteenth century, as at Whitby Abbey.† It is often found in doorways of the fifteenth century; and even when a small octagonal capital is added, the moulding above

* Other terms are convenient, as engaged shafts, semi-shafts, filleted shafts, pointed shafts, angle-shafts, hood-shafts (supporting window hoods and labels,) and wall-shafts, (bearing vaults or arches thrown across.)

† Sharpe's Decorated Windows, Part III.

the impost continuing the same, it is properly called a *quasi-shaft.* Perhaps the doorways constructed towards the close of the fourteenth century are the finest in rich detail and lofty proportions. There are very fine specimens at the west ends of Fakenham, Aylsham, New Buckenham, and Wymondham churches, Norfolk. Heraldic devices, or a series of shields, generally fill the spandrils, as at Uffington, near Stamford, or figures in bas relief, of which there is a most singular instance in the north porch at Yaxley, Suffolk.

Hence the devices which the earliest architects placed over the arch, the Middle Pointed artists transferred to the jambs and archivolt, and the latest of all to the spandrils.

Many doorways, as well as windows, of the earlier styles are flanked on each side by blank arches, on a somewhat smaller scale, in the fashion of an arcade. This may be seen in the west doorways of S. Leonard's Priory, Stamford, of Ketton church, Rutland, of Tinterne Abbey, and in that leading to the Chapter-house at Buildwas.* But it is a peculiarly elegant device in First Pointed and Geometric windows to have either an alternate blank panel, as at

* Potter's Monastic Remains, Plate XIII. In this case the side-arches become properly windows adjusted in continuation of the central door.

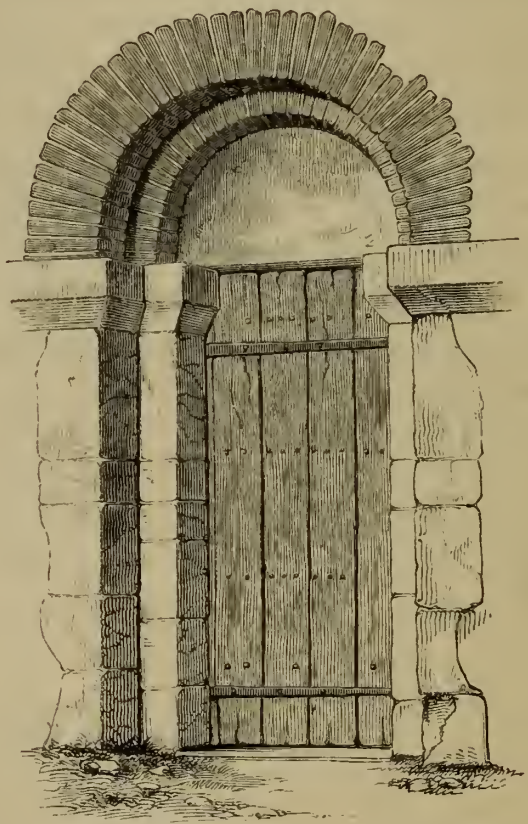
Jesus College chapel, and Great Wilbraham, near Cambridge, or, as in the aisles at Selby and S. Mary's Abbey, York, to be internally enriched by a smaller and more acutely pointed side-arch, filling up the unoccupied width of the bay.*

Of the earliest kinds of doorways we have said nothing in this place, Norman characteristics having been already briefly discussed, and the supposed Saxon examples being of so plain and rude a construction that it is difficult to classify them. The existence of long or flat bricks, square-rib work,† rude imposts, or tri-

* From these blank windows Professor Willis, (Architectural Nomenclature, p. 54,) considers that the frequent panelling of the Third Pointed age was derived, the medieval term for such panels being *orbs*, i.e. blank windows. This principle may be traced to Norman work, in which (as in the clerestory of S. Peter's, Northampton,) an arcade was pierced at intervals.

† Since writing the first part of this book, the author has visited the remarkable church at Bessingham, Norfolk; one of the most decidedly Saxon structures he has yet seen. The tower is circular, but not composed of flints, as usual in that district, but of very coarse rag-stone. The belfry-arches are triangular, with a central baluster shaft, and with a most singular and primitive rib-work of small projecting stones, carried not only round the arch, but down the sides; a feature which has been already noticed as one of the most certain proofs of Saxon work. Not only the tower, but the whole of the north side of this church appears to be of the same date, which can hardly be later than Edward the Confessor, and may be much earlier.

angular heads, will generally determine the early date of doorways. In the west wall of the tower of Wenden church, Essex, (to be added to the list of Ante-Norman towers hitherto discovered)



DOORWAY, WENDEN ESSEX.

is a doorway with solid plain tympanum, and a doubly recessed arch composed entirely of bricks, which, if original, as it appears to be, must be considered as one of the most complete

specimens of this kind of masonry hitherto discovered.

In that extremely interesting work, the Ecclesiastical Architecture of Ireland, by Mr. Petrie, a great number of doorways are engraved, which the author gives the strongest reasons for supposing to belong to the sixth, seventh and eighth centuries. Many of these are of a form hitherto undiscovered in England, namely, of Egyptian or Greek outline, with sloping sides and a flat lintel above. Others approach much more closely to the *opus Romanum* of our Saxon examples. Although in some respects these doorways have peculiarities of their own, yet they generally much resemble what we have called *Ante-Norman* remains. Many of them have the chevron moulding and other ornaments, which are generally called Norman. A perusal of Mr. Petrie's work will probably establish the important fact, that a large class of buildings, now considered (from their style) necessarily of later date than the Conquest, may, in all probability, be safely referred to a period *very* long before that event.*

* The chevron moulding is generally supposed to mark a considerably later era than the Conquest, and it certainly is remarkable that it scarcely occurs in English buildings *known* to be of about that date. Yet its very remote antiquity is certain. Mr. Petrie says, (p. 232) that it is represented as an arch ornament in a MS. copy of the Gospels of the sixth century.

And if this can be predicated of Irish Ecclesiastical remains, there can be no valid reason adduced why it should not be allowed in the architecture of the sister Isle.

The solid tympanum, which occurs in the Wenden doorway, and is a marked characteristic of Ante-Norman work when plain, of Norman when sculptured in relief, is evidently derived from the square doorway, above the lintel of which an arch was constructed to bear the superincumbent weight, the space between the lintel and arch being filled with masonry.*

* A very curious illustration of this is given in p. 131, of Mr. Petrie's work, from Bristway church, county of Cork, and in p. 255, from Glendalough. A third instance, in p. 434, from S. Kevin's House, in the last named place, is considered by Mr. Petrie to be as old as the year 600.

CORBEL-HEAD, HERNE CHURCH, KENT.

CHAPTER VI.

OF THE UNIFORMITY AND PROGRESSIVE CHARACTER OF THE GOTHIC STYLES.

One of the most remarkable facts connected with medieval architecture is its invariably progressive, and never retrospective course. Another, and a still more striking one, is the uniformity which prevailed throughout the kingdom, and even in some sort throughout all the countries which adopted these styles, in the details of each, so long as it was in vogue. Both these are so entirely different from the principles of modern science, that their causes seem to demand a brief consideration.

"Contrary to the practice of our own age, which is to imitate every style of architecture that can be found in all the countries of the earth, it appears that in any given period and place our forefathers admitted but of one style, which was used to the complete exclusion of every other during its prevalence. After enduring for about a century, this style gradually gives way, and another makes its appearance, which in turn assumes the exclusive privilege, and is in turn superseded, so that the build-

ings of every country may be distributed under two general heads; those that exhibit the distinct features of an established style, and those that contain a mixture of the features of two consecutive styles, which are commonly called Transition specimens."*

No architect of the present day is fettered by any other rules or conditions than those imposed by his employers, in regard to the choice of a style. He may copy that of any nation and any period, and he may alter, combine, detract from, or add to it, as he pleases. Indeed he must do so more or less, because no one recognised and distinctive national architecture, either ecclesiastical or secular, exists at the present day. It is all copied, and none of it is, properly speaking, original or self-developed. It has ceased to be inventive, at least in any favourable sense.

But the case was very different in the middle ages, when freemasonry was a craft in the hands of a corporate ecclesiastical confraternity, the members of which seem to have been bound down to certain rules, and yet to have had almost unlimited licence in carrying those rules into effect; precisely in the same way as if the alphabet of a language were given to any one,

* Willis's Architecture of the Middle Ages, p. 7.

and he were allowed to combine the letters into words as he pleased, but not to introduce any new forms or symbols. This seems exactly to illustrate the position in which the ancient freemasons stood. They had certain *kinds* of mouldings, foliage, window tracery, &c., which were, with comparatively trifling modifications and exceptions, repeated in all buildings of the same era, only very arbitrarily combined, arranged, or applied. For example, in the age of the Complete Gothic or Flowing Decorated, all window tracery was designed on one fixed principle; it was neither geometric, nor rigidly vertical, as in the next style, but it was, with surprisingly few exceptions, of wavy and curved lines. Yet each architect seems to have had full liberty to adapt this principle to his own taste; and thus we find thousands of different patterns. Again in mouldings; some ten or a dozen forms being employed by all with inflexible exactitude, their *grouping*, or positions in relation to each other, as well as their application, seems to have been the result of individual caprice.* And herein is the glory of the Gothic styles, that they attained by these means *perfect uniformity combined with almost infinite variety*. There is no monotony, no weari-

* See Hope's Essay, p. 213.

some repetition; every detail has some freshness; yet all are strictly subjected to certain laws of composition. Hence that charm of never-ceasing interest created by perpetual novelty; for this in reality is a much more enduring gratification than either the magnificent effect or the exceeding aggregate beauty of some buildings, both which impressions are rather those of first sight, while the minute detail of any one building might engage the attention for months, or even years.

Little or nothing has ever transpired of the secret system which the freemasons adopted in building, nor of the organization of their body, except that it was ecclesiastical, and under the jurisdiction and benediction of the Pope. It is certain that they were a very numerous, energetic, and talented class, whose genius was chastened and ennobled by all the enthusiasm of a grand religion, and whose efforts were aided by the supply of almost unlimited resources. They must have had the entire monopoly of both domestic and ecclesiastical architecture; though perhaps the distinction is vain, for everything in the middle ages was ecclesiastical. The symbolic marks of the old builders, which often bear a considerable affinity to that spurious kind of heraldic badge called Merchants' Marks, may sometimes be found incised on walls, pillars,

&c., and the author is assured by a member of the present body which perpetuates the name, that they are identical with those still in use; though he may be allowed to doubt whether his informant really ever saw an ancient one, for in England they are extremely rare. A considerable collection of them has been engraved in vol. xxxi. of the Archæologia, chiefly from foreign churches.

Constant communication must have been kept up between all the members of this numerous and widely-extended body. For if we consider the immense number of churches built in every reign from the Conquest to the overthrow of the ancient religion, and the perfect uniformity of style in all of the same period, we shall perceive how complete the intercourse must of necessity have been. Perhaps the following is a plausible scheme of their constitution. Those whom we now call architects seem to have been designated "Masters," as we read that "the Master" did so and so, in ancient accounts, where it is clearly equivalent to "the Architect." These "Masters" must have been trained in one and the same school, just as our clergy are trained in the universities, and they seem either to have been sent about to different stations, or to have been attached to some mother church or Cathedral, or even to have taken up

their permanent residence in certain localities, since we often find several churches in a particular neighbourhood which clearly exhibit the same hand in their design.

Though we may in most of the arts attribute a good deal to mere fashion, which might formerly (it may be said) admit of as little variety in architecture as it now does in the shapes and materials of costume, still this is quite insufficient to account for the positive *identity* of coëval capitals, bases, foliage, windows, &c., in the two opposite extremities of the kingdom. We suppose therefore there was either some central school whence all such details emanated, or, which is the same thing, the "Masters" went about as so many missionaries, disseminating what they had learnt or developed together. How this adherence to rule for a long period can be reconciled with the phenomena of sudden changes in, and eventually complete revolutions of, style, or who had the boldness to suggest, or the authority to enforce, novelties in the masonic art, must be matters of mere conjecture. In England indeed the employment of foreign artists will account for many new introductions; but the question remains the same,—whence did these foreign artists themselves derive them? However such changes were first introduced, they were quickly adopted *semper, ubique, et ab omnibus.*

William of Sens is the first known master mason whose works are extant. The masons were not *incorporated* in England till the thirteenth century; yet there is at least as much uniformity of detail observable in the Norman and (as before observed) even in the Saxon styles. An oath of secrecy is said to have been tendered to all novitiates.* They appear to have been convened and held secret meetings at certain times and places. The name *Free-masons* is a corruption of *Frères maçons*, or fraternity.† A presumptive proof how exclusively the details of the art were in their keeping may be derived from the blundering attempts at drawing them, which are always found in MSS., stained glass, brasses, and fresco paintings. The master masons were generally foreigners, incorporated by Royal authority. When a large building was contemplated, the masons removed in great numbers to the spot; hence they have been well described as a kind of "nomade race."‡ How they were paid, or how maintained during their sojourn, is not certainly known. Perhaps the masters did not so much design, as carry out the designs of powerful and munificent ecclesi-

* See Dallaway's Historical Account of Master and Free-masons. Also Hope's Essay, pp. 203—220.

† Dallaway, p. 434.

‡ Blunt's History of the Reformation, p. 83.

astics.* A good deal, too, of actual handy-work was done by the ecclesiastics† themselves, which will account for any of those touches of the satirical in the way of droll portraits, which seem so pointedly directed against rival clerics.‡ But when we read of repairs and buildings executed by abbats, bishops or monks, we must generally understand the expression to mean that they promoted them, but that masons were employed in carrying them out.§

"The old builders possessed nothing but the sound intelligence of sensible men, and an aptness in practice exercised from earliest youth. They lived more at the building place than at home; thought of little else and did little else; and thus they evidently succeeded much better than our well-grounded sages, who often bring into the world their left-handed productions, or tamely written pamphlets, and would fain superintend the erection of buildings from their writing-desk."‖

One thing is quite clear, and admitted by

* Dallaway, p. 156.

† Maitland's Dark Ages, p. 58.

‡ There are good specimens in the beautiful Middle Pointed chancel at Southrepps, Norfolk.

§ Willis' Canterbury, p. 120.

‖ Whewell's Notes, &c., p. 182.

all; that the masons of the time being were absolutely restricted to *one style*. They never thought of going backwards, under any circumstances whatever, and seem to have contemned the very idea of copying older work, however incongruous would be the result of the new, in additions to, or alterations of, a pre-existing edifice. In fact, they thought they could improve upon it. Of this principle many of the most interesting illustrations might very easily be adduced, did space allow their insertion. Scarcely ever did they compose a single detail even with a view of *suiting* the older work; for in truth they had a thorough contempt for uniformity. They placed traceried windows of many lights in juxta-position with single lancets, pointed with semicircular arches, and complex Gothic columns with plain and heavy Romanesque piers. A good example occurs in the choir of Ely Cathedral, the western portion of which was rebuilt in the Middle Pointed style, nearly a century later than the rest of the same fabric; and the difference between the earlier and later buttresses, triforia, mouldings, vaulting, parapets, and all the other details, is most strikingly seen. The only assimilation is in the size of the triforia, and the terminations of the earlier buttresses, which were reconstructed; and this is perhaps more than will generally be found.

A singular instance on a small scale may be quoted from Quy church, near Cambridge, where one half of a clustered pillar is of the First, the other of the Middle Pointed style, and the capital and base mouldings on the two sides of the same pillar are strictly characteristic of their respective dates. The only instance we remember to have seen of a decided imitation of earlier work is in the three eastern arches of Ripon Cathedral, which were added in the Middle Pointed age with so close a resemblance to the earlier part of Pointed Transition, that it requires a close examination to detect the difference of moulding between the earlier and the later work.* Now and then the arches on one side of a nave were rebuilt after the model of the other side, as at Little Casterton, Rutland, where there are semicircular arches of the fourteenth century evidently suited to others of the twelfth. But the same principle, or rather, perhaps, *feeling*, which made an architect of the reign of Edward I. purposely place windows of different sizes and shapes on opposite sides and ends of his churches, thus deliberately eschewing uniformity, induced his successor of Edward III.

* Dallaway says (Essay, p. 158) that imitation by provincial masons of earlier work in parochial churches may in some cases be proved by dated documents, but he does not specify them.

to disregard any degree of difference and incongruity in altering or enlarging his work. This system of steadily rejecting the imitation of earlier styles gave rise to a very extensive admixture of totally different kinds of work in the same buildings; an admixture which adds very greatly to their interest, if not positively to their effect, as well as affords the most curious instances of mechanical ingenuity and boldness in the junction of the new with the old. Thus few of our Cathedrals or large churches are built entirely of one style; and some exhibit *every* variety from Saxon to Florid Third, as may be seen, each in great perfection, at Barneck. From this very circumstance arises the importance as well as the interest of quickly discriminating the details of each style, so as to be able at the first glance, as it were, to disentangle the apparently incongruous mass, and assign each portion, whether of the fabric or of its ornamental adjuncts, to its proper date.

It is very possible that the masons themselves, in always using the style of their day, desired to stamp an imperishable evidence of date upon the works they were executing.

Even windows were often filled with tracery of a much later date. Thus at Peterborough Cathedral, Berkin, Yorkshire,* and the west

* Churches of Yorkshire, No. vi. p. 12.

front of Kirkstall Abbey, Norman windows have been filled with Perpendicular tracery.

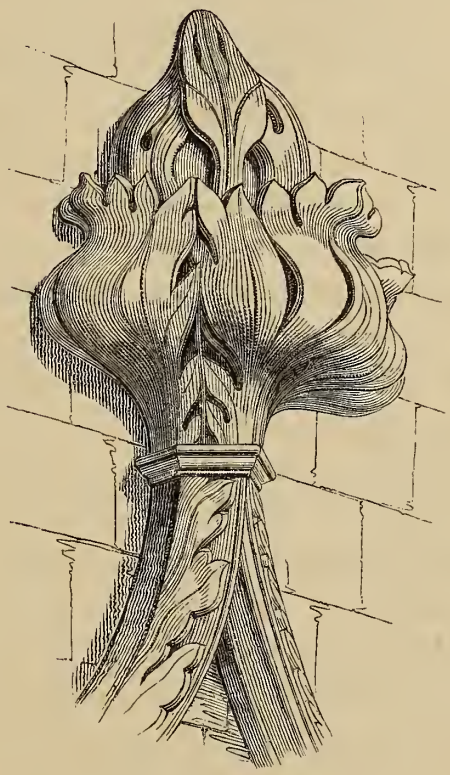
In altering churches, the parts most generally preserved were doorways, nave piers and arches, north-west aisle windows (for some unexplained reason), sedilia, piscinæ, fonts. The parts most commonly innovated were windows, aisle walls, clerestories, roofs, porches, chantry chapels.

It is very singular to observe how even the slightest changes and turnings of style were regularly adopted in the progress of such large buildings as required a great number of years for their completion. For example, the west elevation of York Cathedral exhibits early Middle Pointed work in its lower part, while the belfry windows, battlements, and pinnacles are finished of pure Third Pointed detail.* These changes we may attribute to the succession of new master masons, each of whom could or would design only in the details of his day.

Every master mason must have been able at all times to command the services of workmen well acquainted with and accustomed to the working of his plans. Perhaps these operatives *(confrères)* accompanied him from place to place; certainly they must generally have devoted their lives to the work; for the exquisite chiselling

* Exeter Cathedral was, however, carried out on a uniform plan for fifty years by Bishop Quivil.

of the boss, and floriated capital, or the statuary and canopy work of such a place as the Lady Chapel at Ely, could never have been attained without intense and zealous application, aided



A FINIAL, CIRCA 1350.

by great taste and artistic feeling, and long practice. Probably the few modern architects to whose lot it has fallen to carry out work of this description, would verify this from their own experience. It is one thing to design, another

to find workmen capable of executing accurately the more minute and difficult details. That such workmen did anciently exist, and in great numbers too, is proved by the works they have left behind them as monuments of their skill. It is probable that they worked by drawings, as at present; or the plans were laid out for them by the master's hand, as occasion required; of which perhaps the diagrams and geometric marks sometimes found on the stones of disjointed buildings may be taken as examples. Yet there are parts occasionally to be met with which must be called "botches," and which are clearly the results of extemporary constructive ingenuity without any pre-arranged plan.

Nevertheless, neither the ready means nor a sufficient number of workmen could be procured to execute any large work with anything like the celerity with which in our times we have seen that vast pile, the new Houses of Parliament, erected. A little more than a century ago S. Paul's Cathedral took forty years in building; and probably an ancient Cathedral sometimes was a whole century in being erected, or at least saw the expiration of that period before it could be called finished.* Perhaps no such

* The tower of Strasburgh Cathedral was one hundred and sixty-two years before its spire (530 feet above the ground) was finished.

large building ever was really finished: it was always being built, and enlarged, and improved, just as now York and Lincoln Cathedrals, and poor desecrated Westminster Abbey, are under perpetual repair.

There must have been, for centuries previous to the change of religion, a constant, untiring, incessant zeal for church building, a zeal which is more striking, when contrasted with the dead apathy, or at least the almost exclusive plundering and demolishing, which from first to last has characterized the new system. Only let the reader contemplate the vast quantity of ancient ecclesiastical work we still have left, taking into account the *enormous* destruction of the sixteenth and seventeenth centuries, and the unceasing havoc of the combined causes of neglect, avarice, and profanation, which have been in active operation for three hundred years! When we think of some towns having anciently had forty or fifty great churches, where not more than ten or a dozen now appear, all the rest having long ago been razed to their very foundations; of a thousand abbeys and religious houses, of which scarcely one hundred shattered ruins now remain, though some of them were fully as large and splendid as our first-rate Cathedrals,—Glastonbury, Reading, Bury S. Edmund's; when we know fully what we have lost, in comparison with what we

have left,—we shall be indeed amazed at the almost superhuman efforts of the medieval church! It has been computed that each one of these vast Cathedrals or conventual edifices would cost, in our times and with our much greater facilities, from five to eight hundred thousand pounds.* A million of money must have been expended on the fabric of some of our greatest churches; and if we may credit the accounts of the vast wealth stolen by Henry VIII. from Canterbury and Lincoln Cathedrals, and include all the vestments, plate, and other furnitures, the stained glass, pictures, tombs, silver statues, and shrines, we are justified in doubling that sum.† How inadequate a no-

* Bardwell's "Temples," p. 139.

† See Willis' Canterbury, p. 112. Though the plate and goods of the large abbeys had been for the most part sold in anticipation of Henry's visitations (Blunt's Hist. of the Reformation, p. 138), yet the inventories of his commissioners exhibit vast accumulated wealth. Peterburgh possessed four silver and jewelled processional crosses, (see Frontispiece to this volume); four great candlesticks gilt; three censers, eleven chalices ditto; twelve very costly altar-cloths; about three hundred and ten albes; forty rich embroidered vestments; sixty copes; besides gilt images, frontals, superaltaria, lamps, paintings, &c. (See Gunton's History.) And this was the noble abbey, that on certain anniversaries provided food for three hundred poor; on others gave alms at once to one thousand poor, and for six days following to five hundred daily! (Gunton, p. 298. See Maitland's Dark Ages, p. 348.)

tion do our present bare, dilapidated, and rifled structures afford, of the amount which religion once bestowed on the Church, and which irreligion has sacrilegiously taken from her!

CORBEL-HEAD, CIRCA 1270.
GREAT CASTERTON, RUTLAND.

CHAPTER VII.

THE PRINCIPLES OF GOTHIC COMPOSITION, CONSTRUCTION, AND EFFECT.

These points may be said to involve the whole theory of Gothic architecture; decoration, however prominent a part, being entirely a subordinate, and by no means a necessary accessory, even to a perfect building. Thus the amount of enrichment bestowed upon it does not essentially affect that correct and pleasing ideality of a Gothic structure, which is really due to outline, proportion, and harmony of parts.

The following may be laid down among the principal canons of Gothic composition.

1. To make uniformity of design entirely subservient and secondary to utility. For instance, never to insert a useless window or an unnecessary buttress in one place solely to fill up or relieve a blank space, or because it occurs in another corresponding place: but to pile together, to insert, to add, with any degree of fearless irregularity whatever. Ignorance of this leading principle has been the cause of half the failures in modern designs.

2. To use decoration only as a means of relieving necessary constructive features; and never to add any detail adventitiously, for its own sake, solely for effect, and irrespectively of position, meaning, and propriety. Thus, to make a blank window or doorway, to set up an unmeaning niche without a statue in it, to erect sham gables, block off buttresses midway, because the lower part is not seen (!) as at the Pitt Press, Cambridge, or insert canopies with nothing for them to enshrine, are examples of false principles. Almost all architects of the last generation committed these errors. They saw niches, and turrets, and odd-looking excrescences in old churches, without ever knowing what they once contained, or why they were erected.

Hence we may deduce two further rules: first, to make construction and propriety of composition the primary, decoration the secondary object, and not to decorate at all until a substantial and durable fabric shall have been fully provided for; secondly, to regard reality and truthfulness before mere show, and to conceal nothing from a fancied impropriety of appearance.

3. To attend *exclusively* to utility, and to let effect take care of itself. Thus, if there is any reason for part of a window to be encroached upon, as at Hawton, Notts, or one pinnacle to be larger than another, as in the tower at Grant-

ham, or one angle of a tower to be propped with a larger buttress, as at Horningsea, near Cambridge, or an arch to be contracted or widened to any extent,—to obey the demand fearlessly and without hesitation. Modern men often adopt the most awkward expedients to avoid what is really a great beauty instead of a blemish.

4. To create ideal extent by multiplicity of parts, by distribution of thrusts, division vertically and horizontally by buttresses and string-courses, repetition of features and compartments of continuous vaults and roofs; and ideal height by narrowness combined with length, which are the conditions of the most efficient perspective.

5. To attain infinite variety, both of details and arrangement, even to the extravagant indulgence of caprice, by combining, adapting, and diversifying *given elements*, as mouldings, arches, shafts, panellings, tracery, &c.

6. To make extreme simplicity and extreme richness of workmanship compatible with the same true principles, by always regarding the latter as merely the *luxury of art*, and the legitimate scope for ingenuity, expenditure, and gradual execution.

7. To regulate the exterior plan solely by the internal requirements.

8. To aim at apparent lightness, combined with actual strength; and at the same time to

satisfy the eye by giving the idea of security from each part having its own peculiar support.

Let us now observe how completely every one of these principles has been INVERTED in modern practice, and we shall have obtained some clue in tracing the causes of modern failures.

Modern principles are :

1. To make buildings *uniform* by equal and similar wings, corresponding doorways, windows of the same size and kind, level and regular elevations, not broken up into parts of greater or less prominence and height. Every Gothic new building in Cambridge exhibits these faults, which are the certain result of the same hand composing in two contradictory styles, Classic and Gothic.

2. To add unnecessary and unmeaning ornament in conspicuous positions to attract the eye and produce a showy appearance, leaving the less exposed parts bare and naked in the contrast.

3. To place effect before utility, as by building an inconvenient or unnecessary feature because it is supposed to look well. Hence we have doors which afford no entrance, turrets with no available interior, and chimneys which do not emit smoke.

4. To erect buildings whose primary idea is that of a large unbroken area, without columns and arches, with wide roofs, and without distinct component parts. Such *were* the great majority

of the modern churches, which often had neither buttress, nor string-course, nor arch in the whole design; in short, nothing Gothic about them except the minor details.

5. To use *usque ad nauseam* a few hackneyed Gothic details, copied from celebrated churches or cathedrals, or borrowed from books; and to apply these without sufficient regard to difference in the *kinds* and character of buildings.

6. To sacrifice solidity and strength to unnecessary and adventitious ornament, and to impoverish the fabric to obtain the greatest possible amount of conspicuous but needless decoration.

7. To arrange exterior elevations without regard to the nature of the interior, or to force the latter to suit the former; as to give the outward appearance of nave and aisles where there are no columns or arches inside; of three gabled roofs where there is but one flat ceiling within; of pinnacles or gable-crosses which are but chimneys. Hence the custom of building *masks* either to hide necessary parts which do exist, or to give the idea of those which do not.

8. To be satisfied with actual weakness without even apparent lightness, as by the use of plaistered timber to imitate stone, and by the omission of essential constructive details, such as shafts, mouldings, and the visible resistances of lateral thrusts.

All might be summed up in very few words. The ancient churchmen built for God, not for man; for the church, not for private interest; for religion, not for fame; for endurance, not by contract; for devotion, not in a spirit of economy; *pro salute animæ, non pro crumena.*

The general principles of Gothic construction (which is the carrying out of designing) are as follows:—A decided predominance of vertical over horizontal lines, both external and internal, as buttresses, which cut through string-courses and parapet, and stand in relief against the sky; spires, vaulting-shafts, window-monials and tracery. A pyramidal outline, seen not only in single parts, as in gables and canopies and flying buttresses, but in the general contour of a building, by the disposition of the principal points within the limits of an equilateral or acute-angled triangle, with more or less accurate adaptation. Thus the graduated diminution of buttresses, the stages of towers, the vaultings, imply extension at the base with a convergent upward tendency. This is caused by the circumstance that oblique or lateral pressures imply inclined lines of support;* and as Grecian buildings are horizontal masses sustained by vertical props, so the pointed-arch principle everywhere introduced the lateral abutment in place of the direct bear-

* Whewell's "Notes," p. 20.

ing pillar. Again, a piling of repeated parts one above the other, as in tiers of windows, arcades, and tower-stages, is directly at variance with the horizontal extension of the Classic styles. To sustain all superincumbent weights by arches, and the rejection of all horizontal entablature, and consequently the use of none but small stones, was another essential Gothic feature. But one of the most striking and universal is that pointed out by Professor Willis,* and called by him *decorative construction*. He observes that the eye desiderates the idea of perfect stability, and of due support to every weight, and that this effect is gained by apparent supports where the real one is concealed, or not of striking prominence. Thus, small columns *seem* to bear up the mouldings of an arch, which really depend upon their being bedded in the wall; vaulting-shafts *seem* to support roofs and vaulting-ribs which really rest upon the clerestory walls; clustered pillars *seem* to have a real use in distributing divergent thrusts and weights, which in reality are concentrated on the mass itself, in or near to which these shafts are placed. Inconsistent as this principle may at first sight appear with the essential doctrine of *reality* already alluded to, we must regard it as founded on true philosophical principles of effect. For there can be no unworthy

* Architecture, &c. p. 15.

deceit in supplying that, the absence of which would be a serious detriment to the idea of compactness, unity, and security. In fact this is that all-pervading element of Gothic composition which makes every label seem to rest on corbel-heads; every bracket to be borne aloft on the expanded wings of a supporting angel; every canopy to spring from an independent shaft and buttress; every clustered pillar to be tied together at base and capital, and often midway, by bandages of coalescent mouldings, or garlands of intertwining leaves; every interrupted arch to be corbelled off, or carried by a half-shaft against the face of the wall; every roof of wood or stone to have its bays and severeys propped from below. Let any one notice the palpable defect of a recessed doorway, from which the jamb-shafts have been removed, and he will see how much the eye misses the idea of adequate and complete support, even where the reason informs us of its real existence.

To climb daringly hundreds of feet into the air; to taper away to nothingness in almost evanescent fineness, as the top of a pinnacle and spire; to pile stage upon stage, arch above arch, window above window; to excite surprise, awe, amazement, by achievements of matchless skill, as in spanning a broad space by a heavy vault of stone, far above the reach, almost out of the ken,

of the spectator below; to delight the eye with distant unattainable sculptures of exquisite and tantalizing delicacy; to exhibit something ever new, yet nothing inharmonious; to expatiate in the vista and the retiring perspective of roof and columned row; to terminate nothing abruptly, allow of no grovelling horizontality, or allow it only to set off the predominance of the contrary lines; such are among the conceptions which matured Gothic architecture. Cradled as it was in the very opposite school of art—in the half-pagan Romanesque—it burst through the trammels of its education, and essayed to attain its own heaven-born tendencies almost before it had cast off the details of its prototype. For no sooner was the pointed arch introduced, than the change was at work, and the struggle began. Whilst yet Norman features and ornaments hung heavily upon it, as loth to leave it, it showed symptoms of impatient advance; till suddenly shaking off the last vestige of classic proportion and classic detail, it burst forth at once into all the luxuriance and gracefulness of the First Pointed, or Early English style; a style so transcendently beautiful, so perfect in itself, that it may well be questioned if ever a parallel to it has existed in any age or country; or if the hands that reared, and the minds that conceived the choirs of Ely and Lin-

coln Cathedrals, the Abbeys of Whitby and Westminster and Rivaulx, have not achieved that, which, as unsurpassed by former ages, so future generations shall never see equalled again.

From the Romanesque to the latest Pointed, the principle of the arch was undergoing a regular and progressive change, by gradually losing its prominence as a constructive feature. For whereas the great characteristic of the former, including the First Pointed style, which (in some respects rightly) has been called, "only Romanesque improved," was to have numerous arcades supported by actual bearing-shafts; in the second, or Complete Gothic, only parts or members of complex recessed arches were borne by shafts; and as the one was attached to the wall, and not visibly separable from it, so the shaft also became engaged, and then degenerated into a mere bowtell with a little decorative capital just to mark the impost line. The Third Pointed style was brought about by a complete surrender of the principle of the arch, and by substituting entirely new kinds of surface ornament. The arcade totally vanished, and even where the arch was of necessity retained, it was corrupted into the four-centered form, which is incapable of suggesting either the aspiring majesty or the secure proportions of the equilateral and lancet shapes.

"Gothic Architecture has always the charm of mystery; it does not exhibit itself naked and bare like a Greek temple, perched on a rock; but it appeals to the imagination, veiling itself with walls, and screens, and towers; inducing fancy to supply the deficiencies of the material scene; it delights in bold, striking, and picturesque irregularities, and always appears larger than its actual dimensions: the mouldings, the pillars, the arches, always create receding shadows, and to the eye, the idea of *space* arises from the succession of ideas."*

* Bardwell's "Temples," p. 3.

S. MARGARET'S CHAPEL, HERTS.

CHAPTER VIII.

OF THE PARTS OF CHURCHES.

We may divide the parts of churches into three principal heads: Ground Plan, Elevations, and Arrangements.

The first of these should occupy our earliest attention in the examination of ancient buildings. The simplest plan of a complete church consists of three parts, usually placed longitudinally from east to west; chancel, nave, and tower.

But there are also lateral extensions, consisting of transepts, aisles, porches, and chapels, which are attached towards the north and south, and often give considerable complexity to these primary and essential parts.

The Cross form is the most common in early churches, in which case the tower usually stands upon four arches at the intersection. Double transepts are peculiar to very large churches, as at York and Lincoln. Eastern transepts occur at Durham, and Fountains Abbey: western at Ely.

The tower stands, in England, in *any* position, either attached or isolated, except the east end; and of this examples occur on the Continent.

The elevations comprise the walls as seen at one view from any given point. Thus, the south elevation would exhibit chancel, nave, aisle, clerestory, porch, and tower, with their respective roofs, viewed without regard to perspective, that is, in an impossible or conventional aspect.

The internal elevations are more commonly termed Sections, because they show the arches and other constructive features of the inside, by an imaginary removal of the entire half of the building nearest to the spectator.

Arrangements comprise all the fixtures, which are added as fittings to the fabric; such as seats, screens, altars, font, &c.; and these might be subdivided into *decorations*, as glass, pictures, brasses; and *furnitures*, as pulpit, font, lettern, &c.

Let us now place ourselves in the light of visitors about to inspect an ancient church.

First, we draw, or take notes, of the ground plan. Here my companion has already found something to interest him, and calls my attention to a mutilated capital in the north transept arch.

A. Why have the Puritans been thus wantonly chopping away these exquisite Decorated Mouldings? There was nothing Popish in *them*, surely.

B. Be not in haste to accuse the Puritans. That was done long before them or their reforming predecessors. Transepts were only mor-

tuary chapels, and never used, as with us, for congregational purposes. They were screened off with carved wooden parcloses, and are hence called *Trans-septa*, or cross enclosures, exactly as chancels were called from their *cancelli*, or screens. The capital was injured by the insertion of the screen. Observe the piscina in the corner near the eastern pillar—*respond* we should call it—and see the square hole in the northern wall, the aumbrye, or locker, for the chalice, and the other vessels used at private Mass. See also the evident marks of a stone altar having stood under the window in the eastern wall. Look carefully on the pavement, and you may very possibly find the altar-stone, which you will readily recognise by its five little crosses, though some of them will perhaps be obliterated.

A. Here it is. But how is this? it seems to have had an inscription round the edge in Lombardic characters.

B. A singular and interesting example of a usage I have now and then seen, of marking a monumental stone with the same sacred emblems as the altar. But do not imagine this has ever been the consecrated altar-stone. At S. John's, Stamford, there is a grave-stone thus marked; and in one of the parish churches at York, (I cannot recollect which) is a slab marked with four cross crosslets, with this inscription,

✝ WILLIAM FOX GIST ICY DEUN
E SA ALME EYT MERCY, AMEN.

The clerk tells you it is a Roman altar. But here is the stone altar, too, or rather a fragment of it, of which one of the corner crosses yet remains.

A. Are these commonly found? I have been used to regard the discovery as one of great interest.

B. They are very common. I think I have myself seen nearly a hundred, and I could give you a long list of churches in which they may be found, were it of sufficient interest.

A. But no instances of stone altars yet standing are known to ecclesiologists?

B. Nearly thirty; and this is probably about the extent of the number still remaining. By far the greater part of these are chantry altars.

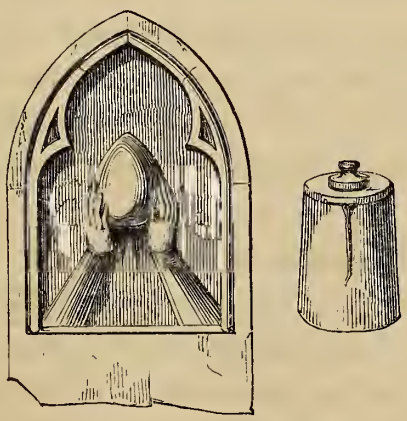
A. They are all of late date I suppose; what our friend the rector of —— would call "popish innovations."

B. It is sufficient to answer, that an altar-stone was lately discovered not far from Lynn, which had Norman ornaments upon it. It argues very great ignorance and presumption to talk so rashly about "innovations." There is scarcely a usage or ceremony of the medieval church which cannot be traced to a very remote anti-

quity. For instance, those splendid vestments of the Roman Catholic Bishop which so scandalized your friend Miss Simple, are to be seen in sculptures of a thousand years old; nay, in the mosaics of the most ancient Basilicas at Rome!

A. What is this little square stone with a hollow in the centre, lying in the corner here?

B. A very interesting as well as rare object. It is a reliquary, and no doubt once contained some bone, or heart of a departed saint. There are very few of these now to be found. I remember one at Brixworth, near Northampton, and I suspect another would be found under the east window of Tinwell Church, Rutland. Here



RELIQUARY, YAXLEY.

is a sketch I took of one lately found in the wall of the north transept at Yaxley, near Peterburgh. The wooden box was placed in a

hollow in the stone, and contained some dust, doubtless of the heart you see held up on the outside. What is very singular, a painting on the interior of the wall exactly represented the reliquary afterwards discovered immediately behind it. Hearts were often thus preserved. In the crypt at Wells Cathedral you are shown a stone coffin, in the side of which is a hollow, and in it was found a copper vessel, containing a heart in clear liquor. Both the vessel and the liquor are still preserved and exhibited.

A. You say transepts are only mortuary chapels; do you mean that this was the case in Norman churches, which are more commonly cruciform than any other?

B. We have no direct evidence of their use; but chapels began to be added to churches as early as the ninth century, according to the statement of Mr. Gally Knight,* when they were usually of apsidal form. Perhaps in Norman times the transepts were rather for symbolism than for use. In very large churches the transepts had aisles on one or both sides, but generally towards the east, which formed a series of small private chapels, as at Peterburgh. But a few examples occur, as at Oakham, Rutland, where the transept is bisected by a row of arches in the centre. At Kegworth, Derbyshire, there

* Architecture of Italy, on Plate I.

is a transept projecting laterally, like a second aisle; and something like this occurs at Trumpington, near Cambridge, where there are chapels forming quasi-transepts projecting from the aisles.

A. Then most of our parochial churches had several altars?

B. Almost all: some of them had four or five, some more. But where there are transepts, aisle chapels, otherwise the commonest, are rare. By aisle chapels I mean a portion screened off from the east end of one or both aisles, which often slightly projects to the north and south, as at Harston and Quy churches, near Cambridge. There is almost invariably a piscina in this part, though it is frequently blocked up.

A. Then a Chantry Priest was attached to the church for the express purpose of saying private Masses, I presume.

B. Yes; a *capellanus*, who enjoyed a separate endowment for this purpose. The Parvise, or room over the porch, served for his private oratory, or study, as we should call it. A piscina is sometimes found even here.

A. Is the use of this slanting hole from the transept into the chancel known?

B. Yes: of its use there can be no doubt; and its existence is a decisive proof that this was a Chantry chapel. It was meant to afford a view of the elevation of the Host at the High Altar. I

think my note-book contains an extract which throws some light upon it. Here it is, from Gunton's History of Peterburgh Cathedral, page 99.

"Overhead," (of the now demolished lateral Lady-chapel,) "were two chambers, which common tradition hath told to have been the habitation of a devout lady, called Agnes, or Dame Agnes, out of whose lodging-chamber there was a hole made askew in the window, walled up, having its prospect just upon the Altar in the Ladies Chappel and no more." At Wingfield Church, Suffolk, precisely such a chamber as that here described, still exists, and it likewise has one of these apertures, which have been called *hagioscopes.**

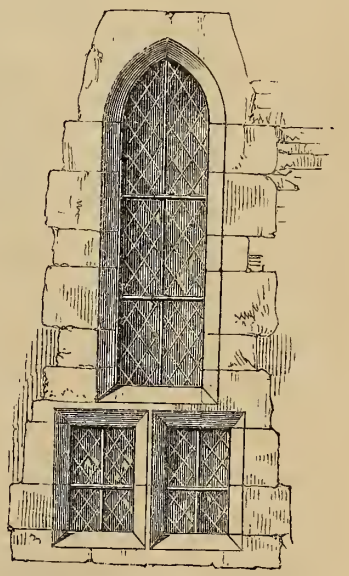
A. *Lychnoscopes* I think you call the low western chancel-windows, of which yonder is a fair specimen. I have read somewhere that nothing is known about them.

B. Some very improbable theories on the subject have been put forth, and among them I fear we must reckon that which suggested the name you have mentioned. A still more fanciful interpretation has lately been given, that they are symbolical of the Wound in our LORD'S side, and it has been proposed to call them, on that

* In this chamber the remains of a "pair of organs," such as was used in churches till the middle of the sixteenth century, are preserved. The largest pipe is about five feet long, of wood.

account, *vulne-windows;* but I confess I think the idea, however ingenious, utterly untenable. I would call them *Offertory windows,* since that was probably their real use. It appears that they originated from an order of Recluses, or *solitarii,* who had their oratories contiguous to, or adjoining churches, and who, not being allowed to communicate with any assembly of men, had these little windows constructed *ut per fenestram possent ad missas per manus sacerdotum oblationes offerre.**

But the practice was doubtless extended from them to the general use of the laity, as very scanty notice can be found of such recluses, and a great number of ancient churches, from the twelfth to the fifteenth century, have such Offertory-windows.† It will be found, however, that windows of the thirteenth century have more



OFFERTORY-WINDOW, OAKINGTON.

* See Martene de Antiquis Ecclesiæ Ritibus, Lib. i. cap. iii. art. IX. § 7, on the offertory, or oblations of the Faithful.

† Mention is made of these Recluses in the History of King Arthur. See "The Church Restorers," a tale, p. 140.

frequently been altered and enlarged for the admission of such apertures, than they have had them constructed from the first. Thus, at Oakington, Cambridgeshire, a small low double window has been inserted just below the original south-western lancet light in the Chancel.

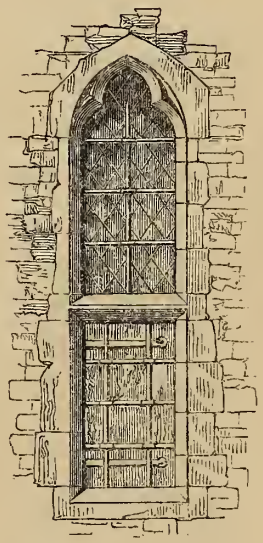
These windows are usually either barred, or closed with a wooden shutter, though the latter

UFFINGTON, LINCOLNSHIRE.

very seldom remains. Some two-light windows have their western light alone transomed, as at Comberton, Cambridgeshire. In some instances, as Essendine, Rutland, there is a pierced foliated circle. At Carlton Rode, Norfolk, is a most singular example, a portion of the internal cill of the south-western chancel-window having been cut downwards, and splayed away, for the Offertory

window immediately beneath it. At Crownthorpe, Norfolk, there is a lancet thus enlarged underneath, in the unusual position of the south-east end of the nave. At Uffington, near Stamford, there is a late but very good specimen of this singular feature, apparently *circa* 1370, and very perfect with the exception of its being blocked and mutilated on the lower part; a fate which but few examples have escaped.

At Little Welnetham, Suffolk, the iron bars remain perfect. Frequently vestiges of internal hinges may be seen; and at Hartley, Kent, the wooden shutter itself still remains. They are sometimes found on the north, and not unfrequently on both sides of the chancel, as at Ufford, Northamptonshire; * West Deeping, Lincolnshire.



HARTLEY CHURCH, KENT.

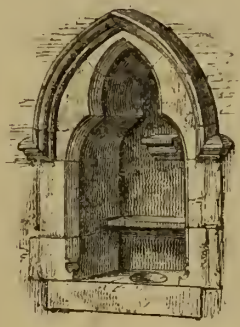
A. Your note-book supplies not a little fund both of illustration and scraps of Ecclesiology. I wish I had some system like that you seem to have adopted, for registering the examples I meet with.

* A great number of examples has been collected and described by the translators of Durandus, in their Introduction.

B. I never visit churches, or read works connected with the subject, without sketching in my note-book any remarkable details, and writing down memoranda of useful or interesting facts. Every church you visit should supply something for your pencil. It is impossible to understand architecture without learning to draw its details.

A. What are the principal objects of your observation in systematically examining an ancient church ?

B. The following may always be looked for ; and unless you have your attention directed to them, you will generally overlook them.



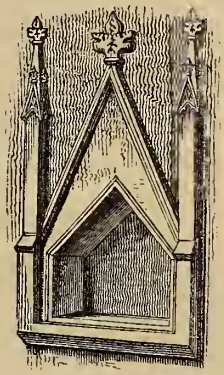
PISCINA, THANNINGTON, KENT.

1. Whether there are any stone altars, or altar slabs on the pavement.

2. The Piscina ; whether double, as it generally was in the thirteenth, and not unfrequently in the fourteenth century, or single ; its position, —in the east wall, which is rare ; on the ground, which is still more so ; in an angle, * or window sill ; with or without canopy, &c.

* Piscinæ occur both in exterior and interior angles. At Southburgh, Norfolk, there is a double piscina, composed of a single one, set in the southern, and another close to it in the eastern wall. Norman piscinæ are very rare, but a few un-

3. Ambry, or locker; a square hole, generally in the north wall of the Chancel, but common in every position, anciently used for keeping the sacred vessels, cruets, tapers, and other articles of that description. Those which retain their original doors, shelves, and other internal fittings, are noticeable. There is a good specimen at Barrington, Cambridgeshire.



AMBRY, EWERBY, LINCOLNSHIRE.

4. Sedilia; the recessed seats, generally triple, often graduated, in the south wall. These were for the priest and deacons, and they are often very richly ornamented, with lofty foliated canopies, as at Hawton and Heckington churches.

5. Rood-screens and Rood-lofts; what remains there are of the latter, which sometimes, as at Upper Sheringham, Norfolk, may be found quite perfect; paintings of Saints upon the lower panels, such as the gorgeous examples at Eye, and Yaxley,

doubted examples are known. A "curious and beautiful Norman piscina" was lately found at Pytchley Church, Northamptonshire. (Archæological Journal, No. X. p. 109.) The reader need not now be informed that its use was for pouring off the water after rinsing the chalice. The purpose of the wooden or stone shelf across the interior is uncertain.

Suffolk; Beeston Regis,* Trimmingham, and Carlton Rode, Norfolk; remains of tracery, which will often be found lying useless, or applied to some other purpose for which its exquisite delicacy is but little adapted; rood doors and staircases; whether of stone or wood.

PANEL, EYE CHURCH, SUFFOLK.

6. Parcloses or chapel-screens, which sometimes, but rarely, had lofts or galleries as well as rood-screens. At Sawston, near Cambridge, a part of a parclose-loft remains, and at Dennington, Suffolk, they are all quite perfect.†

7. Church chest, which is often extremely curious either for its antiquity or its elaborate workmanship. These are often of cedar wood, and sometimes contain very interesting carvings, or paintings and stencilled diapers both within

* In this church a fine specimen of an ancient silver paten still belongs to the communion plate.

† It is very rare to find the *Host-bell*, or *Sancte-bell*, still attached to the rood-screen. This was commonly placed in a small turret on the east gable of the nave, where it still remains in a few instances, as at Tallington, near Stamford.

and without. At Swaffham Bulbeck, Cambridgeshire; Fersfield, Suffolk; Empingham, Rutland; Burgate, Suffolk; there are such cedar chests with paintings on them. Some are enormously massive, even eight or ten feet in length, and clamped impenetrably with iron.* Others are elaborately enriched with panels and tracery, and a good many exist of the fourteenth century.

8. Fonts;† the variety and devices of which are almost infinite. Those of Norman date are square, circular, or (more rarely) octagonal, and sometimes have a central stem with surrounding shafts. The next style will generally be known by the mouldings of the detached supporting shafts, which are seldom wanting; the next by *engaged* shafts and flowing tracery panels; the latest by the invariably octagonal form, panelled stems, and foliated circles, inclosing shields or roses, on the bason. Rich specimens of the

* The church chest should be opened where it is permitted, for it sometimes contains loose brasses, old books, antique plate, vestments, or curious paintings. But the uses to which they are too often put are extremely discreditable.

† Several examples remain of early *leaden* fonts: perhaps the finest is one of Norman date, in the romantic chapel of Llancat, or Lancourt, on the banks of the Wye, in Gloucestershire. The details are of the most exquisite delicacy, and this specimen appears to be little known to ecclesiologists, though given in vol. xxix. p. 19, of the Archæologia.

thirteenth and fourteenth centuries are rather rare, and always interesting. Painting and gilding may sometimes be traced upon them. At Gresham, Norfolk, and Gorleston, Suffolk, the seven sacraments are sculptured, and adorned with colours which yet remain almost perfect.

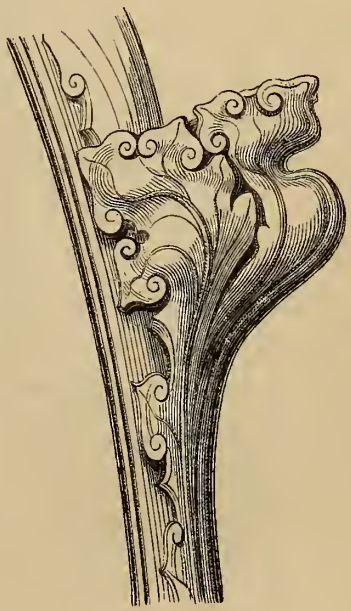
Fresco-paintings, ornamental metal-work, encaustic tiles, stained glass, sepulchral crosses, effigies,* and arched recesses, should be noticed; and the arms and heraldic bearings on them compared with sculptured stone shields on the exterior, by which the date of the fabric may often be ascertained, as for instance at Felbrigg, Norfolk.

9. Monuments of all kinds, but especially those exquisite canopied niches which enshrine recumbent effigies or floriated crosses, deserve our best attention. A great number of the most beautiful designs still lurk unheeded, often plaistered or boarded up, or nearly hacked to pieces, in even humble village churches. Pathetic records they are, amidst all the present wretchedness and desolation of our old churches, of times, O how much more reverential than our own! I remember finding one of the most gorgeous and elaborate designs I ever saw at Irnham, Lincolnshire. When you meet with these, pass them not by with merely a hasty glance. Their

* These are sometimes of carved oak.

sculpture is always of the best description. The canopies, with their delicate crockets and clustering finials, are ever varied, and generally exquisitely chaste. I will shew you a specimen of a crocket of the most common occurrence in the fifteenth century, as regards shape and character, though you will never find two exactly alike.

10. Masonry; with a view especially to *Long-and-Short* work, the great criterion of Saxon structures. This should be looked for with especial care, because it is highly probable that a great many portions of Saxon churches still remain, though the greater part of a fabric may have been rebuilt in later times. At Hemington, Debenham, Gosbeck, and Layston, all in Suffolk, I am told that traces of this peculiar masonry may be observed, but I have not visited them myself.



WEST DOORWAY, BRIDLINGTON, CIRCA 1470.

Churchyard Crosses; of which several very beautiful examples still remain uninjured, and

a very great many have the steps, the base, or part of the stem, yet in existence. There is

CHURCH-YARD CROSS, JEFFRESTON, PEMBROKESHIRE.

a fine and perfect one at Higham Ferrers, and a First Pointed one at Great Grimsby.

Yew-trees. A few of these venerable appurtenances to Church-yards may be found of very great antiquity, as at Tinterne, where they are probably as old as the neighbouring Abbey.

They seem to have been planted to supply the "palms" used according to the Catholic ritual for Palm Sunday, as they are still put to this use in some parts of Ireland. The church-yards of Totteridge and Enfield, Middlesex, and Winwick, Lancashire, have fine yew-trees.

A. The interest of Ecclesiology seems to consist in this, that by it you can classify and distinguish parts, as well as interpret their uses and assign their dates. Place an ordinary spectator before the finest old church in Christendom, and he would only tell you in general terms, that it looked very handsome, or very old, or very ornamental.

B. Just so; and the consequence would be, that however correct his taste, or keen his perception of real beauty, he could not enter into the details, or understand *why* this was curious and that peculiarly instructive as a specimen of its kind. All would be a blank, from inability to divide and particularize. He would regard it only as a whole.

A. This is what I have heard frequently expressed, and indeed what I felt myself, till you directed my attention to such minutiæ as the mouldings of arches and columns, the construction of roofs, the development of window-tracery, and similar things. And I now see why any column or window is of interest to one who

knows exactly the place it holds in the process of formation, that is, from what it arose, and into what it afterwards passed.

B. It is, I think, certain, that if the clergy and the public generally knew something more about their churches, we should have less of apathetic acquiescence in their desecrated condition, and of misuse in their application, than we now have to deplore. Much indeed has been done since the late movement in favour of architectural restorations commenced, simultaneously, it may be said, in the Roman Catholic and the Anglican Church, and doubtless through the influence of the same Catholic feeling in both. But I think the members of the latter communion have begun to suspect, that the adoption of the architecture and arrangements of the former, *without their uses*, is but a pitiable inconsistency. Much as I honour their zeal and piety, I greatly question the permanent result of their good intentions.—Do you observe yonder stone parclose, or chapel screen, with beautiful diaper upon it? This, I suppose, we must attribute to the date of Edward II., for the four-leaved diaper is generally confined to that period, or at least to an age but little removed from it either way. It is rather rare. Let us make a sketch of it, and we will see which of us succeeds the best. Here is mine in a very

few minutes. Why you have only done a single leaf. I should recommend you to draw it

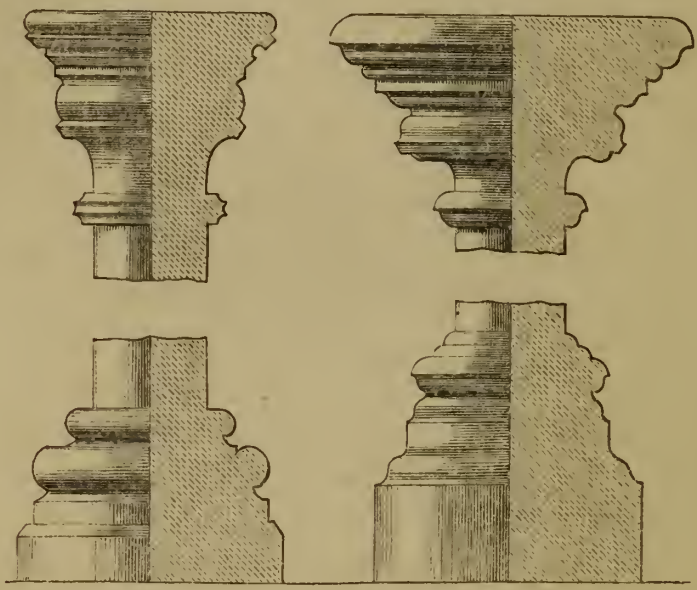
SQUARE-LEAVED DIAPER, CIRCA 1320.

of a larger size. Precisely the same pattern occurs on the tomb of Aylmer de Valence, Westminster Abbey.

I will now shew you how to draw capitals and bases in the most practical way; and I think this church will supply good examples of all the styles, which we will place thus close together in order to compare their respective peculiarities. Observe especially the upper member, or *abacus*, of each. It will generally be found the most characteristic mark.

A. How do you account for the poor and late style of the clerestory windows in so elaborate a church as this?

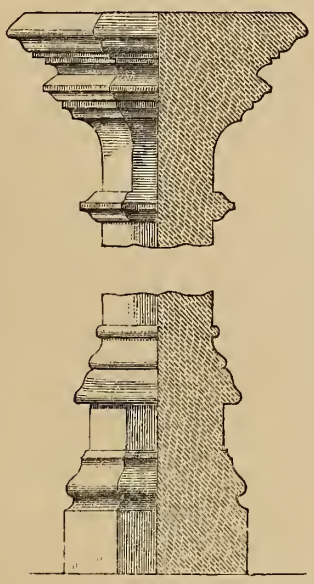
B. Clerestories are decidedly rare before the fifteenth century; most churches previous to that time having had high-pitched roofs rising immediately above the nave arches, vestiges of which will generally be observed on the eastern



FIRST POINTED. MIDDLE POINTED.

wall of the tower. Norman clerestories (in parochial churches) are extremely rare. In the thirteenth century they were very low, and lighted with lancets or with foliated circles; of the first of which Darlington church, Durham, of the latter, Etton, Northamptonshire, are examples. In the fourteenth, the same form prevailed, as at Trumpington and Elsworth, Cambridgeshire.

At Upper Sheringham, Norfolk, there are foliated circles alternately with plain two-light windows —an interesting and perfect example. At Roughton, in the same neighbourhood, there are large Decorated windows, with internal jamb-shafts supported on projecting heads. And at Cley there are doubly feathered quatrefoils alternating with trefoiled lancets. The windows are generally placed above the crowns of the pier-arches, and not above the columns.



THIRD POINTED.

A. Church towers appear to me the most difficult to reduce to anything like a systematic classification. Yet they are among the most interesting parts of a church, and generally the oldest.

B. Their antiquity is very great. The extant continental Romanesque campaniles are still numerous, and many of them of great height and size. There can be little doubt that they were designed for the reception of bells.

A perfect Gothic tower generally stands at the west end. It is divided into stages; and angular

buttresses, gradually tapering off towards the upper extremity, combine with the surmounting spire to give a slightly pyramidal outline to the whole structure, which is not observable in the Romanesque examples.

An elaborate doorway, and a spacious window above it, occupy the first and second stages on the western side. The others are generally left blank, or are pierced with a small single lanciform light.

The middle stage often contains a beautiful little window of square or circular form, foliated or filled with tracery. One of the most elaborate tracery occurs at Cromer. There is a singular cruciform design at Hanworth, Norfolk.

The upper stage has large belfry-windows, in the earlier instances divided by a shaft, and filled with louvre boards or slates instead of glass, to emit freely the sound of the bells. These windows extend to all the four faces, though that on the eastern side is often interfered with by the ridge of the roof, or is of smaller and plainer design. Later towers have two such windows on each side, with one or two transoms. The tower is finished above in various ways, either by a pyramidal overlapping cap, which is the earliest, as in the Saxon tower at Sompting, or a flat parapet, embattled, or otherwise enriched, or by a lofty spire of wood or stone. The corner

buttresses, when carried to the top, are often surmounted by rich pinnacles, square, octagonal, or even pentagonal, as at Morton and Heckington, Lincolnshire.

The earliest spires are of wood, covered with lead disposed in scales or spirally attached. At Bourn, Ickleton, Triplow, near Cambridge, Walsingham, Norfolk, Wickham Market, Suffolk, Sutton, in Holland, Lincolnshire, and Chesterfield, are good specimens still remaining. Lincoln, Ely, Peterburgh, and Old St. Paul's Cathedrals, as well as Tewkesbury and Malmsbury Abbey churches, had similar spires, as we know either from documents or existing engravings. Early spires form cappings* to the substructure, which changes from the square to the octagonal by *broaches*, or semi-pyramidal abutments at the base,

* At Stanion, Northamptonshire, is a Third Pointed tower with a broach-spire; almost a unique example, unless that of S. Alkmund, Shrewsbury, can be quoted. Properly speaking, spires are only acute roofs or weatherings to towers, originating early in the Romanesque period, but so changed in principle by subsequent developments, that their true character was entirely lost. As soon as the broach or capping spire gave place to that rising out of the middle of the tower, the primary notion was effectually dropped. The earliest example of the latter kind with which the author is acquainted, is at Langtoft, near Market Deeping, which is about the date of Edward II. There is a plain corbelled parapet, and no angular pinnacles. The spires on the west front of Peterburgh Cathedral are of similar kind, and little later.

while later spires rise from behind the parapet, as it were out of the middle of the tower, especially in work of the fifteenth century, with small flying buttresses from the four pinnacles extended to the corresponding faces. Crockets often decorate the spire, by being disposed along the angular ribs from the base to the capping-stone, which is generally worked into a bold *crope*, or finial.

Spire-lights are disposed in tiers, on alternate faces. They have acutely-pointed crocketed heads with crosses. The larger, or lower tier, is set in the cardinal faces. Some spires have three tiers. At Grantham there is a circlet of eight spire-lights, forming a mid-way crest of great beauty. A similar effect is gained, as at Salisbury, by a band of ornamental work, or by pannelling, as at St. Michael's, Coventry. Some spires are perfectly plain, without any windows, as at All Saints, Pavement, and S. Mary Castlegate, York.* Many are ribbed at the angles, but without crockets. Some spring from lanterns, of octagonal form, of which there is a First Pointed example at Barneck. That at Exton, Rutland, (now unfortunately taken down,) was one of the

* As spires advanced in style, the spire-lights became uniformly less in size and projection, so as ultimately not to interfere with the pyramidal outline of the spire. In early examples the lower tier is often very large, and the head very acutely pointed, without crockets. The lower tier is of two lights, the others usually of one.

finest,* late in the Middle Pointed period. That at S. Michael's, Coventry, is of remarkably slender and airy proportions.

Some towers have light open lanterns without spires, of which there are most elegant specimens at York. At Howick, Northamptonshire, and Boston, Lincolnshire, are fine examples.

The construction of our best spires is extremely fine and ingenious.† The masonry averages from six to nine inches in thickness, and in some cases it is not more than five, as at Moulton, near Spalding. In fact, spires are thin and light shells of cut stone, protected from the effects of the wind by the spire-lights, which for this reason are disposed at all the points of the compass, and are left open (as is generally thought) to present the less obstacle to the violent currents of air. With all this, their durability seems something wonderful, and it is really astonishing that their destruction by lightning is so rare. The capping-stone, which is generally very large and heavy, and necessarily so, having to sustain the

* At Wilby, Northamptonshire, is a singular example of a quasi-lantern and spire, of Third Pointed date.

† A slight entasis, or swell, will be found in most, but by no means in all spires. The reason of this is, that a really straight line looks concave to the eye from a distance; which accounts for the same fact in classical columns. At Glinton, Northamptonshire, this bulge is very remarkable, as are the proportions of the spire, nearly twice the height of the tower.

iron rod and weathercock, is sometimes kept in its place by a rod running some way down the interior of the spire, with a balance-stone or weight at the lower end, as at S. Mary's, Shrewsbury, or inserted into a cross beam, which is the modern practice.

Many spires are after-works of a much later period, as at S. Mary's, Stamford. And many towers will be found to have *squinches*, or corner arches for the reception of stone spires which were never erected, though contemplated, or at least provided for, as at S. Martin's and S. John's, Stamford.

Towers are ascended by ladders or staircases, the latter enclosed in a turret of internal or external projection. More rarely they are of wood, as at Wenden, Essex, Horningsea and Histon, Cambridgeshire, or even, in late towers, of wattled boughs, or laths covered with plaster. When the turret projects externally, of square or polygonal plan, it gives a very satisfactory variety to the structure, and is generally managed with great gracefulness and ingenuity. At Paston, near Peterburgh, it terminates in a capping which merges into the broach of the spire. Sometimes it rises above the parapet, and carries the vane, as at Cavendish, Suffolk, but generally is weathered off below it. One of the belfry windows is frequently thrust out of the centre by the position

of the belfry-turret, as at Oakham and Grantham, Rutland.

Some western towers stand upon three arches, which is the case when the aisles extend flush with the western face. Examples are very numerous; Trinity church, Cambridge; Great Casterton and Clipsham, Rutland; Coton, Fen Ditton, Girton, Little Wilbraham, Cambridgeshire; Swanswick, Somersetshire.

Some towers stand externally on arches to admit roadways through them, as at All Saints Cambridge, Metton and Diss, Norfolk. At Cranbrook, Kent, there is an entrance on one side into the tower, instead of at the western end; and this is not very uncommon in early examples.* Isolated or detached towers are not very uncommon, as at East Dereham and West Walton, Norfolk.

The plan of towers is generally a square; sometimes an octagon, or a square changing to an octagon, of which there is a fine Middle Pointed specimen at Helpstone, Northamptonshire. At Swaffham, near Cambridge, an octagon changes

* The extraordinary beauty of Third Pointed towers, especially those of Somersetshire, must not be passed over without notice, as many of these are among the purest and best specimens of Gothic architecture of any age. Taunton, Huisch-Episcopi, Langton, Shepton Mallet, Glastonbury, S. Cuthbert's, all in Somersetshire; S. Neot's, Huntingdon, Great Ponton, near Grantham, are all superb edifices of the fifteenth and sixteenth centuries.

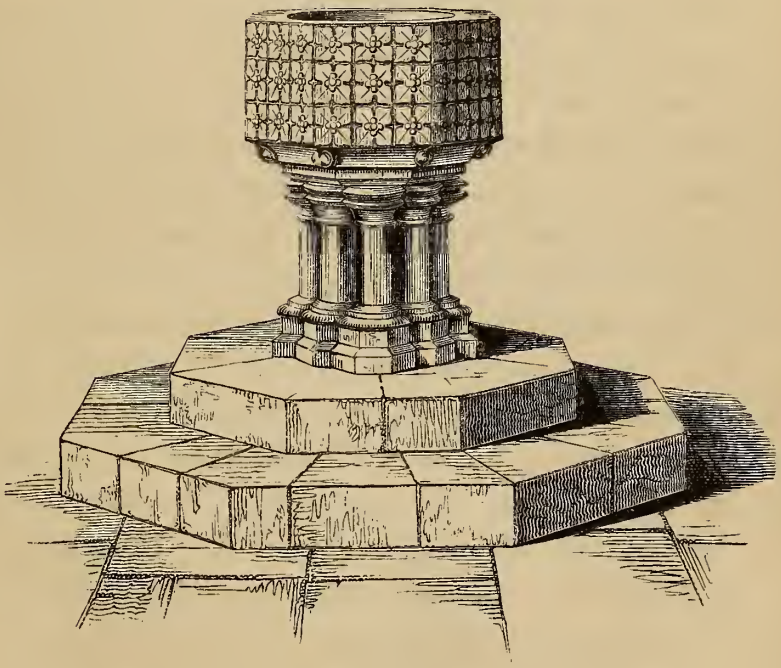
into a polygon upwards. Oblong towers are very rare, as S. George's, Stamford. Some have gabled roofs, as Tinwell, Rutland, or each face gabled, as at Deopham, Norfolk, which, however, is rare.

Some towers are vaulted in stone in the lower stage, as at Uffington, Lincolnshire, a circular aperture being left in the crown for the ascent and descent of the bells. The Saxon tower at Barneck has a First Pointed vault thrown across its lower part by plain cross-springers. But this is most commonly the case when the tower stands in the centre of a cross church. There is a rich lantern vault at Morton, Lincolnshire, of early Third Pointed date. Many Norman examples exist.

A picturesque and rather singular substitute for a tower is found in one or two villages in Norfolk, of which Southburgh, near Hingham, is one. Here there is a low thatched shed erected in the church-yard, something after the fashion of a lich-gate, for the reception of the bells, which are suspended within a foot or two of the ground. The effect is good; at least there is something interesting in the very peculiarity and ingenuity of the contrivance.

A. I must thank you for your long lesson, which is not beyond the memory of a novice in Ecclesiology, such as I must profess myself while in your company. But I intend to tax

you much further. See, we were unconscious of this shower while examining the interior of the Church. So let us take rest and shelter in this fine Decorated porch, while you read me your long-promised lecture on MONUMENTAL BRASSES.



FONT, SWATON CHURCH, LINCOLNSHIRE, CIRCA, 1340.

CHAPTER IX.

MONUMENTAL BRASSES.

The application of engraved metal to monumental purposes appears to have been introduced at least as early as the commencement of the thirteenth century, both in our own country, and on the Continent. The art itself was by no means a new one: the engraving of metals for ornaments, plate, &c., had been practised with success for many ages; so that Brasses will be found to shew no gradual development from rude and coarse beginnings, but, on the contrary, may be said to have been in perfection at their first introduction, and to have slowly declined at the close of the fifteenth century, till they became utterly debased, both in design and execution, in the seventeenth. The origin of this kind of monument may probably be found in the effigies in low relief, common in the previous century, which may have been gradually relinquished for flat metal plates from motives of convenience; as the latter, forming part of the pavement, would be no encumbrance in a church, and be less liable to be effaced by footsteps. By this supposition, it is evident that the canopies so frequently found in Brasses are the retention of the architectural

accessories to the figure in relief, and might, therefore, be expected from the very first. In France, before the Revolution, there were numerous specimens, both of the enamelled works, called "opus de Limogiâ," from their being chiefly manufactured at Limoges, (which were introduced from the East in the twelfth century, and attained to much celebrity), and also of flat and relieved effigies, dating from the thirteenth century downwards; but these were all, almost without exception, destroyed for the sake of their material; and England is now the only country in which monuments of this kind are to be found to any extent. The study has, therefore, an additional claim on our interest, as being peculiarly a national one. But England has by no means escaped all plunder of this sort during the last three centuries; if it had, there would scarcely be a church without its Brass, and the floors of our Cathedrals would still shine with the glittering metal. The pavement of York Minster alone contained in the year 1612 *one hundred and twenty* Brasses, of which *one hundred and nineteen* have since disappeared; and a glance at that of Lincoln or Westminster will shew the effigies of knights and bishops and the magnificent crosses we have lost. However, we are fortunate in having more than two thousand remaining, to record the taste, skill, and piety of our ancestors.

Considered as works of art, the earlier Brasses especially partake of the beautiful simplicity and religious feeling observable in the architecture and general system of design at the time. In some cases, the drawing is not anatomically correct ; but the drapery is usually deserving of high praise, and where chain-mail or minute ornaments are employed, they are executed with such care, that the labour and patience expended must have been very great.

In speaking more particularly of Brasses themselves, it may be necessary, for the sake of those who have not hitherto paid any attention to the subject, to explain first what kind of monument "Brasses" are. They may be defined to be engraved metal plates fixed into a cavity in a stone slab, either forming part of the pavement of a church, or placed upon an altar-tomb, and usually representing by their shape and incised lines the figure of the person deceased. The material of which they are made is that anciently called *latten* or *laton*, a hard mixed metal similar to what is now technically called "cock-brass," and used for the cocks of casks and cisterns. As there was no manufacture of brass plate in England till the year 1639, the "Cullen plate," made at Cologne and in the Low Countries, was probably used ; but it does not therefore follow, as some have supposed, that the Brasses we now

possess were incised by the Flemings, and imported into England; on the contrary, there is every reason to believe that they are the work of English artists, inasmuch as there is a great and characteristic difference between our own and those still remaining in Belgium. In the latter the whole design is contained in one large sheet of metal, generally set off by diapered groundwork, but unbroken by the stone in which it is imbedded; while ours are composed of detached pieces placed in separate cavities, the slab forming the back-ground. The much greater proportion of Brasses to be found in the eastern counties than in the west has been accounted for by the same theory, that they were brought over from Flanders, and chiefly used in the parts lying nearest the Continent; while others have imagined it to be in consequence of the greater wealth of these manufacturing districts; but this is more likely to have produced high-tombs with rich canopies and sculptured figures, than simple plates of brass. It seems reasonable to suppose that the real cause was the great scarcity of stone in this part of England, of which we see proofs in the very extensive use of flint in building churches; in the rarity of spires; in the frequent absence of buttresses; as well as in the form and construction of the round towers: this may have been one cause why effigies of metal were more ge-

nerally used than those of stone. The counties in which the greatest number of Brasses remain are Norfolk, Suffolk, Essex, and Kent; they are also very numerous in Cambridgeshire, Northamptonshire, Bedfordshire, Buckinghamshire, Hertfordshire, Middlesex, Surrey, and Sussex; but in the western counties they are comparatively rare. There are very few in Gloucestershire, Worcestershire, and Shropshire; and scarcely any in Staffordshire: and in Wales we know of none worth mentioning, except at Llanwryst, Swansea, and Whitchurch. Glasgow Cathedral is said to possess the only example in Scotland, and in Ireland there are none but two of late date in Dublin Cathedral. On the Continent there are some very fine specimens at Bruges, similar to those of Flemish work at Lynn, Newark, &c.; a few at Aix la Chapelle; some in Meissen Cathedral, and perhaps in other parts of Germany; one at Seville in Spain; also a few in Funchal Cathedral, Madeira, and an interesting one in Constance Cathedral, of the year 1416, to Bishop Hallum, which is said to have been brought from England, and resembles our own in every respect; a further proof that a manufacture of them existed in this country. These, with some which are believed to remain in Denmark, of the fourteenth and fifteenth centuries, are all the foreign Brasses we can mention. Italy is entirely without them.

It appears from examination, that the incised lines were filled with pitch or some resinous composition, either black or otherwise, by which the design was rendered more apparent. Coats of arms, the apparels of ecclesiastical vestments, and official robes were very generally coloured; and accordingly, where the colour is gone, we find the surface *hatched* in cross lines. The red pigment was a substance very similar to sealing-wax, and required *coarse* hatching for its reception; it was poured into the matrix when in a liquid state and left to harden; a cheaper process than enamelling, but more perishable. Where the heraldic *argent* was to be used, a mixed metal resembling pewter was employed, for which the matrix was scored away to a flattish surface, and appears cut in perpendicular lines. The colour was easily effaced by being constantly trodden upon, and there are but few good specimens of coloured Brasses remaining; but many will be found to possess traces of their ancient decoration. One of the most perfect occurs at Little Easton, Essex, engraved in Part XIV. of Messrs. Waller's very valuable series, (which may be recommended as by far the most accurate and instructive work on the subject that has yet appeared, and one that should be in the possession of every archæologist); others exist at Broxbourne,* Herts; Standon,† Herts;

* Waller's Brasses, Part V. † Ibid. Part IX.

Allhallows, Barking,* London; Ketteringham, Norfolk; and the Quay Church, Ipswich.

Enamel was used but sparingly; for brass is not capable of sustaining the intense heat required; and therefore, either a copper plate was employed instead, or the enamel was first inserted on a thin lamina of copper, and the whole laid on the brass, as is the case in the shield of Sir John D'Abernoun,† at Stoke D'Abernon, Surrey. The surface of the metal was sometimes, though rarely, burnished or gilded, as in the Beauchamp Brass at Warwick,‡ which is also remarkable for having the heraldic charges on the figures *pounced* with a beautiful diaper pattern; probably an unique example of such decoration.

It has been questioned whether these memorials were intended for likenesses of the deceased. In the earlier Brasses, the countenances bear so great a similarity to one another, that they can scarcely be believed to be portraits. There are, however, examples which are undoubtedly so; there is often a marked resemblance between persons of the same family, as may be observed in the Brass of Alderman Feld and his son, at Standon, Herts; and where successive generations are represented, the likenesses are generally perceptible, though the artists must have been different; but if a

* Waller's Brasses, Part VI. † Ibid. Part III.
‡ Ibid. Part VI.

stranger becomes connected with the family, his features will be found entirely dissimilar: this is illustrated by the Brasses in Hatley Cockayne Church, Bedfordshire. We may add that in Alderman Walter's tomb, in York S. Crux, the inscription asserts that the figure is "his true portraicture."

The earliest Brass of which we have any record was at S. Paul's Bedford, to Simon de Beauchamp, who died before 1208; there were others at Wells, 1242; at Lincoln, 1253 (existing when Leland wrote); Rochester, 1277; and at York, 1279 (described by Drake). In Salisbury Cathedral may still be seen the indent of a cross with a demi-figure, to Bishop Bingham, 1247. At present, the earliest known Brass is that of Sir John D'Abernoun, 1277, at Stoke D'Abernon, Surrey; and the two next are Sir Roger de Trumpington, 1289, Trumpington, Cambridgeshire; and Sir Robert de Bures, 1302, Acton, Suffolk. Several of this early date were apparently executed by the same hand, as they shew great similarity in some minute points. The artist's mark is affixed to the Brass of Sir John de Creke, 1324, at Westley Waterless, Cambridgeshire, which is evidently by the same hand as that of Sir John D'Abernon, Junior, at Stoke D'Abernon, Surrey, as they are nearly facsimiles of one another.

We will now proceed to describe the costume which prevailed during the three centuries in

which Brasses are chiefly to be found; but in this we must confine ourselves to such as is usually seen in the monuments of the period: referring those readers who may desire further acquaintance with the fashions of our ancestors, to Planche's History of British Costume, and Hartshorne's Sepulchral Monuments of Northamptonshire.*

ECCLESIASTICAL COSTUME.

The vestments in which the clergy are commonly represented may be divided into two kinds; the *Eucharistic*, consisting of the amice, albe, stole, maniple, and chasuble, used at the celebration of Mass; and the *Processional*, consisting of the cassock, surplice, almuce, and cope, used in processions, and at Vespers, and the ordinary services. Besides these, there are the tunic for the subdeacon, and the *dalmatic* for the deacon; which are also worn, together with the mitre, gloves, sandals, pastoral staff, and ring, by Bishops; and with the crozier and pall by Archbishops.

The *amice* (amictus), the first of the Eucharistic vestments put on, was a square white linen

* Since the above was written, a valuable work on costume has appeared by F. W. Fairholt, Esq. F.S.A. It is, unfortunately, somewhat incorrect with respect to the ecclesiastical vestments; for instance, the chasuble is confounded with the cope, and the amice considered as the collar of the former. The *coped* priest at S. Cross, Winchester, is described as wearing the *alb and stole*, both which are *Eucharistic* vestments.

cloth, placed round the neck in such a manner that the apparells sewed on to one of the sides met in front, while the rest might be made to cover the head as a veil. It is generally taken to represent the "helmet of salvation;" but many different meanings have been assigned to it, according to its application to the head, shoulders, throat, neck, &c., (for which, and for other similar points, see Pugin's Glossary of Ecclesiastical Ornament and Costume.) It was introduced about the eighth century.

The *albe* (alba) was a linen garment, with tight sleeves, reaching to the heels. It was fastened round the waist with a girdle, and always ornamented with apparells at the wrists and feet. In the earliest ecclesiastical Brasses, (Oulton, Suffolk; Kemsing, Kent,) the apparells are continued entirely round the wrists; but from the middle of the fourteenth century this was reduced to a small square on the upper side. It has many significations, but is generally taken as a symbol of purity. It is a vestment of great antiquity, and the origin of the surplice and rochet.

The *stole* (orarium, from *ora*, the edge of a robe,) was originally a robe, with stripes of embroidery in front; but it was much reduced in early times, so that the stripes are the only part retained. It consists of a long strip of linen, usually with fringed ends, placed round the

neck, and reaching below the knees. It is worn by deacons over the left shoulder only, tied under the right arm; by priests, over both shoulders, crossing on the breast, and passing through the girdle at the waist; and by bishops, over both shoulders, but not crossed. As the chasuble covers all but the two ends, the crossed part is not usually visible; but it is shewn when worn with the *cope*, which is very rarely the case. An example, however, occurs in a Brass at Horsham, Sussex, (Waller's Brasses, part X.) At Sudborough, Northamptonshire, is a group of small figures; one of which, a priest, has all the Eucharistic vestments *except the chasuble*, and of course shews the stole crossed.

Its first use was that of a handkerchief, to wipe the face; but it afterwards became too highly ornamented, and was retained as a decoration.

The *maniple* (manipulus) was also, at first, a handkerchief, as its name implies. As represented in Brasses, it is a strip of linen, similar to the stole, but much smaller, and worn over the left arm.

The *chasuble* (casula) is the last and outermost of the Eucharistic vestments. In its primitive form, it was perfectly round; but in the middle ages, of an oval shape. It is without sleeves, and has an opening in the centre for the head. It is usually ornamented with orphreys, either round the edge or in front, and probably always behind.

The oldest form of orphrey is in the shape of a pall, of which there is an example at Wensley, Yorkshire. The collar round the neck is generally concealed by the amice; but it is shewn in the Brass of Sir Peter Legh, at Winwick, Lancashire. The chasuble was in use in the sixth century; and is symbolical of Charity, of the Church, &c.

The *dalmatic* was a vestment worn in very early times by deacons, and also by civil personages; and is still retained by the English sovereigns, at their coronation. It was a long robe of white silk, with full sleeves; and partly open at both the sides, always fringed. It was worn by bishops below the chasuble, and above the *tunic*, which was a somewhat similar garment, but with smaller sleeves, and not open at the sides.

Of the Processional vestments, the *cassock* was the undermost, and was a long garment reaching to the ground, with short narrow sleeves. It was probably the ordinary habit of the clergy,* when out of the church, as Brasses of ecclesiastics are sometimes met with, which represent them in this vestment only.

The *surplice* was a linen robe, frequently plaited, with very large sleeves; and similar to the modern dress of the same name, but not open in front.

* As it still is with Roman Catholic Priests.

The *almuce* (almutium) was a cape or tippet of white fur, covering the shoulders, with long lappets in front. In Brasses, it was filled with white metal, which but seldom remains. It was worn externally by *canons*, as a mark of dignity.

The *cope* (cappa) also called *pluviale*, was originally a protection against rain. Its name "cappa," is derived from the hood fixed to the back of it, which, until the fourteenth century, was a real hood, but after that time became merely an ornamental appendage. Its shape is an exact semi-circle, with a border on the straight side, frequently very rich with figures of saints; and sometimes the whole garment is covered with diaper-work. The *morse*, or clasp, which fastens it in front, is often of very beautiful design; sometimes with the owner's monogram (Balsham, Cambridgeshire), or arms (Fulbourn, Cambridgeshire), and sometimes with a subject from Sacred History.

Of the additional portions of costume belonging only to persons of episcopal rank, the *mitre* is a cap of silk or linen, ornamented with embroidery or precious stones, having *infulæ*, narrow strips of linen, hanging behind. It does not appear to have been introduced till the eleventh century, and was at first a plain round cap. The addition of a circle of leaves to the mitre of an *arch*bishop is modern: there was also no distinction from mitred abbats,—although Pope Clement

IV. ordered precious stones to be restricted to bishops; but the rule was not observed.

The *gloves* (*chirothecæ*) were usually ornamented with a device in a circle or square, at the back. They were anciently used by priests also.

The *sandals* were the coverings for the feet, and generally appear worked with a stripe.

The *pastoral staff* was originally a simple crook, and emblematical of the pastoral office of a bishop over his flock. The upper end is curved and the lower pointed, to shew the authority of the Church over the obedient and disobedient, according to the Latin line:

"Curva trahit mites, pars pungit acuta rebelles."

It is sometimes bound with a *vexillum*, or banner of the Cross, as in the Brasses of Abbat Estney, 1498, Westminster Abbey; and Bishop Goodrich, 1553, Ely Cathedral. Mitred abbats are properly distinguished from bishops either by holding the staff in the right hand, and giving the benediction with the left; or by having it in the left hand with the crook turned inwards. This rule, however, will be found to have as many exceptions as examples; the Brass of Abbat Estney is in all respects like that of a bishop; and the effigy of a *bishop* in the Temple Church has the crook of his staff turned *inwards*.

The *crozier* is a staff ending in a cross instead

of a crook, and belongs to none below the rank of archbishop. Examples occur at York, 1315; Westminster, 1397; New College, Oxford, 1417.

The *ring* is worn on the second finger of the right hand, and symbolizes the temporal dignity of the bishop, as well as his spiritual wedding with the Church.

The *pall*, (pallium,) the distinctive mark of an archbishop, or pontiff, is a scarf of peculiar shape, made of white wool, and embroidered with purple crosses. It was granted as a mark of dignity by Pope Gregory to S. Augustine of Canterbury, and still forms part of the arms of that see.

The above are the vestments which are most commonly found in ecclesiastical Brasses, but there are also others, peculiar to the rank or office which the person commemorated may have held. Examples of canons and deans are not unfrequently to be met with, as at Great Hasely, Oxfordshire; sometimes of masters or members of a college, as at New College, Oxford; Kings' College, Cambridge; and of monks in the dress of their respective orders, (generally a surplice or rochet, and a hood,) as at Cottenham, Yorkshire; Cowfold, Sussex; S. Laurence's, Norwich, &c. We are not aware that any Brass exists which represents a *deacon*, unless the curious palimpsest at Burwell, Cambridgeshire, be excepted, where

the back of part of the canopy shews the fragments of a figure in a dalmatic.

Having thus attempted to describe the several habits of ecclesiastics, it will now be necessary to explain the manner in which these, as well as the changing costume of the *military* and *civil* classes, were represented on their monuments. For this purpose we shall divide the time into centuries, and endeavour to point out the peculiarities which help to determine the dates of Brasses in each, and mention such remaining examples as are most worthy of notice.

FOURTEENTH CENTURY.

Ecclesiastical.—At first sight it may appear a very difficult thing to assign a tolerably correct date to an ecclesiastical Brass, where there is no variety of costume, no change of fashion to be our guide. A little practice, however, will shew that there are other marks besides this, which will answer the purpose almost as well, and are by no means to be overlooked ; peculiarities belonging, in many cases, to the artist, and to the conventional method prevalent at the time, but easy to be remembered, and recognized at a glance when once understood.

The earliest ecclesiastical Brass is probably that of Adam Bacon, at Oulton, near Lowestoff, Suffolk. The date of this is about 1310, and it

represents a priest in the Eucharistic vestments, with his feet on a lion. There is also a demi-figure of a priest, about the same date, at Merton College Chapel, Oxford; and another at Kemsing, Kent; to which may be added the Brass of Archbishop Grenfeld, 1315, in York Minster; and the curious cross to Nichol de Gore, circa 1320, at Woodchurch, Kent. The peculiarities observable in these are, *deeply cut lines*, usual in all Brasses of the first half of this century; the chasuble fitting closely to the body, and evidently of thin materials; drapery judiciously arranged, and represented by a few bold lines; the hair *long and flowing* behind the ears (which are large and prominent); the amice lying loosely round the neck, and not, as in late Brasses, like a stiff collar; the neck itself usually broad and thick; the stole and maniple wider at their ends; and the apparels at the wrists of the albe *continued entirely round*, a practice probably discarded before 1337, the date of the fine priest at Higham Ferrers, Northamptonshire; but to be seen in the curious Brass of John de Grofhurst, c. 1330, at Horsmonden, Kent.*

Of the ornaments in the embroidery of this century, a peculiar kind of cross called the *fylfot* is to be noticed: it occurs in the amice of the

* Engraved in the Illustrations of Monumental Brasses, published by the Cambridge Camden Society, p. 195.

Kemsing priest, and in that of a curious demi-figure at Ockham, Surrey, (circa 1330,) as well as in some military Brasses. It is said to have been in use as a religious emblem long previous to the Christian era. It does not appear to have been the custom to represent priests in the Processional vestments till the latter half of this century,† the earliest we can mention is at Rothwell, Northamptonshire, 1361 ; after this period, they became common ; examples occur at Fulbourne, Cambridgeshire, c. 1370 ; S. Cross, Winchester, 1382, &c. Of the magnificent Flemish Brasses which remain of this date, three are ecclesiastical ; S. Albans ; North Mimms, Herts ; and Wensley, Yorkshire ; in addition to their peculiarity of being on large unbroken plates, they are distinguished by the elaborate character of the embroidery and ornaments, and the rich diapers and architectural accessories surrounding them. The great breadth of some of the lines may also be noticed as characteristic.

The latter half of this century affords numerous examples of ecclesiastics in both kinds of vest-

† This has been the cause of a strange mistake in Carter's chapter on Costume in Fosbrooke's British Monachism. He appears to have been ignorant that there were two distinct upper vestments, and supposes that a change of fashion took place about this time, by which the chasuble was worn *open in front.*

ments, whose dates, where not known, may be fixed with tolerable accuracy, after a little practice, chiefly by the flowing hair, (not extending below the ears, as in the early part of the century,) the arrangement of the amice; and the graceful folds of the drapery in general. Examples,—Shottesbrooke, Berks, c. 1370; Watton, Herts, c. 1370; Northfleet, Kent, 1375; Bishop Trellyck, 1360, Hereford Cathedral; Brundish, Suffolk, c. 1360.

Military.—The first among the military Brasses which claims our notice, is that of Sir John D'Aubernoun, at Stoke D'Abernon, Surrey, of the date of 1277; in this, the costume is of the same kind as that of Sir Roger de Trumpington, 1289, at Trumpington, Cambridgeshire; Sir Robert de Bures, 1302, Acton, Suffolk; and Sir Robert Septvans, 1306, Chartham, Kent. The three last are cross-legged. The costume of these figures is very similar, and of simple character; they all wear the hauberk or coat of mail covering the whole body, with the *coif-de-mailles* for the head, and *chausses* for the legs and feet, surmounted by a plain surcoat, without sleeves, fastened round the waist with a girdle. The shield is of a convex form, and is supported at the left arm by a *guige* or strap passing over the right shoulder; the sword is suspended across the body by a leathern belt; the knees are protected by *genouillères*; and prick-spurs are fastened by a strap to

the heels. The last mentioned example differs from the others in having the head and hands uncovered, (shewing the flowing hair common at the period,) and in bearing *arms* on the surcoat; it also has, as well as that at Trumpington, the addition of *ailettes*, square pieces fixed on to the back of the shoulders, to protect the neck, usually bearing the arms of the wearer. A curious little Brass of this date (c. 1300) occurs at Buslingthorp, Lincolnshire; and represents the demi-figure in mail of Sir Richard de Buslingthorp; this has been engraved in Waller's Brasses, Part X.

It will not be necessary here to mention the various kinds of mail in use at this period, as there is but little variety in Brasses, and they are already well described in Hartshorne's Sepulchral Monuments of Northamptonshire (page 32). The *banded* mail, consisting of rows of mail and leather alternately, appears to have been prevalent after 1300; and may be seen in the demi-figure of a knight at Croft, Lincolnshire, c. 1310; and in the cross-legged figure of Sir — Bacon, c. 1320, Gorleston, Suffolk, &c. In the reign of Edward II. we find a gradual change from mail to the use of *plate;* commencing with *roundels*, circular pieces to protect the arm-pits and elbows (Gorleston, Suffolk; Pebmarsh, Essex, c. 1320); to which were added *greaves*, for the front part of the legs; *brassarts* from the shoulder to the

elbow; *vambraces*, from the elbow to the wrist; and *sollerets* for the feet; the *gauntlets* also are now divided into fingers. (Westley Waterless, Cambridgeshire, 1324; Minster, Isle of Sheppy, c. 1330. Stoke D'Abernon, Surrey, 1327.) At this period there was a much greater number of garments worn over and under the hauberk; as the haketon, cyclas, &c. all described in Hartshorne's Sep. Mon., and Planche's British Costume. In this reign, also, the *rowel* spur is used, and the *bascinet*, a conical steel helmet, worn on the head. In the succeeding reign the change to entire plate was nearly completed; the great alteration is the adopting a *jupon*, a tight fitting linen garment, with the *baudrick* or military belt, which always accompanies it, in place of the cumbrous clothing hitherto used; this is sometimes ornamented with the wearer's arms, and the lower edge is often escalloped, shewing the shirt of mail beneath it. On the neck is worn a *camail*, a tippet of mail attached to the bascinet; on the thighs cuisses or sometimes pourpoint; on the elbows *coutes*; and on the shoulders, *epaulieres*; the gauntlets have cuffs, and knobs on the finger-joints called *gadlings*; the sword is hung on the left side. (the scabbard often highly ornamented,) a small dagger, called the *anelace*, or *misericorde*, on the right; and frequently the head rests on a tilting helmet

and crest. This change seems to have taken place about 1350, but the extreme rarity of any Brasses during the first thirty years of Edward III. renders it difficult to assign a precise date. Good examples of this reign occur at Elsing, Norfolk, 1347; Wimbish, Essex, c. 1350; Cobham, Kent; Mereworth, Kent, c. 1360; Horseheath, Cambridgeshire, c. 1360; Watton, Herts, 1361; Drayton Beauchamp, Bucks, 1368, and 1375; Aveley, Essex, (Flemish) 1370; Chrishall Essex, c. 1370; Broughton, Lincolnshire, c. 1370. From this time until the early part of the next century, there was but little further change in the military costume; banded mail, (for the camail,) is still occasionally seen; as at Wood-Ditton, Cambridgeshire, 1393. Brasses of this date are not uncommon. Examples,—Acton Burnell, Shropshire, 1382; Little Casterton, Rutland, 1381; Calbourne, Isle of Wight; Southacre, Norfolk, 1384; Irnham, Lincolnshire, 1390; Etchingham, Sussex, 1387.

Civil.—The earliest brass effigy of this class that we can mention is that of a lady at Trotton, Sussex, 1310; the costume is much the same as in the figure of Lady Cobham, at Cobham, Kent, c. 1320; and in those at Westley Waterless, Cambridgeshire, 1324; and Minster, Kent, c. 1330.

The chief characteristic is the *wimple*, a handkerchief round the neck and chin; a long robe

covers the whole body, shewing the tight sleeves of an under garment, and sometimes surmounted by a mantle. At East Wickham, Kent, is a curious little Brass to John de Bladingdoun and wife, c. 1325, representing two demi-figures within a floriated cross. The male costume of Edward the Third's reign was either a jupon with its belt, or a straight robe reaching to the feet, under a mantle buttoned on the right shoulder: frequently a hood is seen round the neck; the beard is long and pointed, and the hair flowing. From about 1350, the female dress is a tight-fitting gown with half sleeves, having long pendent lappets attached to them (as at Bray, Berks, c. 1370; and Chrishall, Essex, c. 1370); the head-dress is either a veil or a peculiar net, confining the hair round the forehead. At about 1380, the hair is sometimes seen braided in a square plait on each side; as at Little Casterton, Rutland, 1381; Southacre, Norfolk, 1384: this is probably the same as the square head-dress so frequently seen in churches of this date, to support a dripstone, &c. A remarkable fashion, prevalent at this time, and also in the next century, is a garment with the sides cut away, so as to shew the kirtle beneath it, at the hips: a long flowing mantle is generally the outer covering, fastened across the breast by a cord with pendent tassels; the shoes, like those of the men, are

sharply pointed, and the sleeves of the kirtle have rows of small buttons up to the wrists. The custom of placing dogs at the feet of female figures was still generally practised; they were probably intended as emblems of fidelity and affection, as the lions at the husband's feet shewed his courage and generosity. In some cases, these animals were also part of the arms or the crest of the family; in others they appear to have represented favourites belonging to the deceased. Cushions are frequently placed under the head of the lady, and the tilting-helmet under that of the knight; these are sometimes supported by angels. Brasses of civilians are not by any means common in this century; the fine ones at Lynn. Norfolk, 1349, 1364, are among the earliest; and others occur at Great Berkhampstead, Herts, 1357; Shottesbrook, Berks. c. 1370; Cirencester, Gloucestershire, c. 1360; Stoke, Fleming, Devon; Rusper, Sussex; Wimmington, Beds, &c.

Crosses, Canopies, Inscriptions, &c. Perhaps the most beautiful, and certainly one of the rarest kinds of monuments are the brass crosses, formerly to be seen in almost every village chancel. The frequent occurrence of the large slabs which once contained them will not fail to have been noticed by all church visitors, as much as the absence of the brass itself will have excited their regret.

In no case did puritan zeal more signally

defeat its own purpose than in this; for by leaving the indented stone to shew the extent of their devastations, so far from raising in us any feelings similar to their own, they have only increased our admiration for those who laid such appropriate memorials down, and our indignation against those who tore them up. They appear to have been more common in the 14th than the 15th century, very many having been surrounded by inscriptions in Lombardic letters. They usually consisted of a long straight stem with leaves sprouting from it, resting on steps or some religious symbol, extending at the head into a floriated quatrefoil containing either a figure of the deceased or of a saint. Probably the earliest of which there are any remains is that in Merton College Chapel, Oxford, c. 1310, of which the demi-figure of a priest is almost all now existing. Another, of about 1320, occurs at Woodchurch, Kent, of which a cut is given;* this consists of a quatre-foiled circle, with fleur-de-lis forming the arms, enclosing a figure of a priest: the inscription is in Lombardic characters; "Mestre Nichol de Gore: gist en ceste place; Jhesu Crist prioms ore: Qe merci lui face."

Others of this century remain at East Wickham, Kent, c. 1325; Merton Chapel, c. 1350. Wimbish, Essex, c. 1350; Taplow, Bucks, c.

* See page vi.

1330; Buxted, Sussex, c. 1370.* At Horsted Parva, Sussex, was, until a few years ago, a fine early cross, which was allowed to be stolen for the sake of the metal. It is needless to refer to examples of their matrices, as almost every cathedral and very many parish churches contain them: they are sometimes of enormous length, as in the north aisle of the choir at Ely.

The *canopies* so frequently found above effigies, and adding so greatly to the beauty of the monument, are of too much importance in deciding the date of a Brass to be left unnoticed. There are but very few remaining of the early part of the 14th century, but their matrices are occasionally to be found, as at Gorleston, Suffolk, c. 1320; Pebmarsh, Essex, c. 1320; Stoke by Nayland, Suffolk; and Bottisham, Cambridgeshire. They were usually of a triangular form, with foliations, crockets, &c.; the pinnacles are supported on slender shafts, sometimes banded. The earliest still existing is probably that of Lady Cobham, at Cobham, Kent, c. 1320, which is of this character. The ogee form came into use

* This beautiful Brass has been engraved by the Cambridge Camden Society, in their "Illustrations of Monumental Brasses," but very incorrectly; the leaf terminating the lower arm of the cross being entirely omitted. It is to be regretted that most of the other Brasses given in that work are liable to the same charge of inaccuracy.

about this time; an early example is in the Brass of Sir John D'Aubernoun, Jun. 1327, Stoke D'Abernon, Surrey. Figures of saints are found, now as in later times, in small compartments, as in the splendid Brasses at Higham Ferrers, Northampts, 1337, and Elsing, Norfolk, 1347. In the Flemish Brasses the canopies are excessively rich, and filled with tracery and diaper of the most elaborate description. During the latter half of this century the cusps are frequently terminated by trefoil ornaments, as at Fulbourne, Cambridgeshire; Cottingham, Yorkshire; Chrishall Essex; and groining is sometimes though seldom used.

With regard to the *inscriptions* of this century, the earliest are those composed of distinct capital letters running round the four sides of the stone; these were formerly filled with brass, but the metal very rarely remains. They are sometimes in Latin, but more commonly in French. The simplest form is merely the name and the prayer for mercy, as ✠ SIRE : JOHAN : DAUBERNOUN : CHIVALER : GIST : ICI : DEU : DE : SA : ALME : EYT : MERCY. They are generally made to rhyme either in two or four lines; in the latter case, the two last lines are frequently these,

KI : PUR : LALME : PRIERA : QUARANTE : JOURS :
DE : PARDUN : AVERA :

A narrow fillet of brass was sometimes used at this time; there are remains at Stoke D'Abernon, Surrey. The capital letters were discontinued about the middle of the century, and inscriptions then began to be placed below the feet of the figure. Inscribed scrolls are sometimes found, but not so commonly as in the next century. They are placed at the mouths or hands, and sometimes borne on the breast, and consist of sentences such as the following. "Jhū mcy. ladye helpe." "mcy, ihū, and gramcy." "Jhū fili dei, miserere mei." "mater sancta dei, memento mei." "Sancta Trinitas, unus deus, miserere nobis," &c. English epitaphs were but rarely used as yet; perhaps the earliest instance is at Wanlip, Leicestershire, 1393. French was very generally discontinued at the close of this century; several examples of it, however, may be found as late as 1420.

FIFTEENTH CENTURY.

Ecclesiastical. The early part of the fifteenth century affords a great variety of Brasses of all kinds; ecclesiastics are perhaps more generally represented in copes than in chasubles: the orphreys of these are usually highly ornamented, either with figures of saints, or with the letters of the wearer's name alternately with embroidery. Good examples occur at Boston, Lincoln-

shire, c. 1400; Castle Ashby, Northampts, 1401; Balsham, Cambridge, 1401; Great Shelford, Cambridge, 1411. Such vestments as these were, doubtless, intended to represent those which the same persons wore when living. A beautiful Brass of a priest in the chasuble, of the date of 1432, occurs at Great Bromley, Essex. A great prevalence of *small foliage* is observable in the embroidery of this time: the general lines are narrower, and less deeply cut; the hair is still worn flowing. Of kneeling priests, good examples occur at Upper Hardres, Kent, 1405; Exeter Cathedral, 1413. Demi-figures of priests are very common in this century; and the *ciborium* is frequently carried in the hands.

From about the middle of the century a considerable difference and gradual debasement is perceptible: the lines of the hair become less flowing, and quite straight by the end of the century. The amice is evidently of much stiffer materials, and does not hang round the neck in the graceful manner of earlier times: the chasuble also is thick, and accordingly devoid of the marked folds produced by a thin vestment drawn tightly over the figure. The practice of *shading* at the sides to gain a perspective effect, (which so completely destroyed all beauty in the Brasses of the next century,) was now introduced; but this must not be con-

founded with the slight shading seen at the curl of a fold, as this is no mark of debasement, but merely a convenient method of representing the sunken surface. Fine examples of ecclesiastical Brasses of this century occur at New College Chapel, Oxford, 1417 ; Cowfold, Sussex, 1442 ; Warbleton, Sussex, 1432 ; Balsham, Cambridgeshire, 1462 ; Westminster Abbey, 1498.

Military. Until about 1410, the military costume continued much the same as during the last thirty years of the previous century. Excellent examples occur at Wisbeach, Cambridge, 1401 ; Hurstmonceaux, Sussex, 1402 ; Gunby, Lincolnshire, c. 1405 ; Stoke by Nayland, Suffolk, 1408. In some there is already a change towards complete plate, either in the introduction of taces, (the camail being still retained,) as Lingfield, Surrey, 1403, and the sword-belt worn diagonally, as at Spilsby, Lincolnshire, c. 1405. The interesting and splendid Brass at Little Horkesley, Essex, to Sir Robert Swinburne and his son, who died respectively in 1391 and 1412, shews the armour of both periods together, and proves that it was the custom to represent this class, as well as that of ecclesiastics, in the particular dress they wore when living. As early examples of *complete* plate, we may mention Wixford, Warwickshire, 1411, and Digswell, Herts, 1415. One of the latest Brasses in which

the camail is seen, is at Theddlethorpe, Lincolnshire, 1425. We now find a gorget of plate or *hausse-col*, used over or instead of the camail; the jupon is relinquished for a *cuirass* or breast-plate, with depending plates overlapping one another, called *taces:* and the sword belt is disposed diagonally. The arm-pits, and sometimes the elbow-joints, are protected by circular pieces, called *pallettes*, which sometimes contain heraldic bearings; the legs and feet remain as before. Examples of this period occur at Trotton, Sussex, 1419 (one of the finest Brasses existing); Wiston, Sussex, 1425; Burnham Thorpe, Norfolk, 1420, &c.

The *circular* form for the pallettes is scarcely ever found after 1430; from this time to about 1455 they are usually seen in a shape somewhat resembling a small shield. The *coutes* have frequently a fan-like appearance; and a hook on the right side, for a lance-rest, is now first found; the spurs are now screwed on to the heel instead of being held by a leathern strap round the foot, as before; a circlet of leaves, termed an *orle*, is occasionally seen round the bascinet; but from about this time the head is more usually bare, and the hair worn very short; *moustaches* are seldom seen after 1430. A *tabard*, or coat embroidered with armorial bearings, both on the body and sleeves, is common in this century: a good example occurs at Childrey, Berks, 1444. In

a Brass at Quy, Cambridgeshire, are twelve kneeling children, all in tabards. The first appearance of *tuiles*, plates buckled on to the taces and covering the thighs, may be dated at about the middle of the reign of Henry VI.; an early example of them occurs at Cople, Bedfordshire, 1435.

A considerable change had taken place by about 1460: the breast-plate is of very globular form; *pauldrons* protect the shoulders; the coutes are very large and sharply pointed, and often fastened with spring-pins; the sword hangs diagonally from the middle, instead of the side, crossing the left knee; the lower part of a shirt of mail generally appears underneath the tuiles, and a gorget of the same round the neck; the genouilleres are usually of great length; and the head and hands bare. Good examples of this period occur at Cirencester, Gloucestershire; Ashby Ledgers, Northampts; Hildersham, Cambridgeshire; Winwick, Lancashire. From 1480—1500 we find a few more changes to be noticed. Rounded shoes, called *poulains*, cover the feet; *pass-guards*, plates rising perpendicularly from the shoulders, protect the side of the neck; the hair is worn long again; and the coutes generally smaller. Collars of S S. are not unfrequently found in military Brasses; also collars of suns and roses, the badge of the Yorkists (used first in 1461), as at Broxbourne, Herts. *Quartering* arms was

first practised by Edward III. *Supporters* to shields were first used by Richard II. The blazonry of the arms of France was *semée* of fleurs-de-lis until the reign of Henry V.; after that time it was *three* fleurs-de-lis.

Civil. The male costume at the commencement of this century is the full-sleeved gown and mantle as before; a good example occurs at Dartford, Kent, 1402. From about 1420, the mantle is less frequently worn, (except by civic functionaries,) and the gown with its girdle is the usual outer garment. On the girdle is generally hung the *gypciere*, or purse, and the rosary, and sometimes an *anelace*, or dagger. The shoes are sharply pointed, and the hair cut short. But little change is observable during the rest of this century: from about 1460, the sleeves are much narrower, and of the same width throughout; the hair is worn long again, and the shoes rounded. Examples of this century occur at Linwood, Lincolnshire, 1419 and 1421; Graveney, Kent; Beddington, Surrey, 1432; Charwelton, Northampts. *Judges* are represented with a *coif* of fur on their heads: as at Gunby, Lincolnshire, 1419; Gosfield, Essex, c. 1430; *notaries* have an ink-horn and pen-case. Founders of churches sometimes hold a church in their hands, as at Cowthorpe, Yorkshire; North Creake, Norfolk. Emaciated figures, with or without winding sheets, are common.

The female head-dress of the reigns of Henry IV. and V. is one that frequently occurs and will generally be found to be before the year 1420 ; it has been called the *crespine*, and is of a square shape, the hair being gathered into a caul on each side, and partly covered with a veil, which hangs down to the shoulders. The dress for the rest of the person is a tight-fitting kirtle with close sleeves below a mantle fastened with a cord across the breast, the tassels of which usually depend in front. Examples occur at Gunby, Lincolnshire, c. 1405 ; Burgate, Suffolk, 1409 ; Sawtry, Hunts ; Wixford, Warwickshire, 1411, &c. At about 1420 the common female attire is a loose robe covering the feet, with full sleeves, and very short waist ; the hair is gathered into a large caul on each side, over which a veil hangs, the upper part being either of a flat or peaked shape ; East Anthony, Cornwall ; Horley, Surrey. This dress continued to be worn throughout the reign of Henry VI. ; but with several variations, particularly in the head-dresses, which are now very numerous, but usually of a lunar or heart-shape. The kirtle and mantle, however, still continued to be worn, as also the sideless garment described under the last century ; a fine example occurs at Enfield, Middlesex, 1446. A heart-shaped head-dress is very common about 1460 : at this time also the sleeves are not worn so full, and the waist is longer.

A considerable change took place about 1470. From this time till about 1490 the *butterfly* head-dress is the one commonly worn, in which the hair is confined in a caul at the back of the head, and covered with a kerchief stiffened out to resemble a pair of wings. The sleeves are now generally tight, and with fur cuffs. Good examples occur at Isleham, Cambridgeshire, 1483. At the close of this century a triangular head-dress called the *kennel* came into fashion, and is very commonly seen in the Brasses of the period. The gown is often cut square to the neck, and a long pendant hangs from the girdle, with a pomander or scent-box at the extremity of it. The distinguishing garment of a *widow* is a *barbe*, or gorget, at the chin. Unmarried females wear long hair flowing over the shoulders. A mantle embroidered with arms is often worn over the other garments. The children are usually represented in groups below the parents, during the latter half of this century, and afterwards. Their dresses vary according to their stations in life; at Wenden Lofts, Essex, there is a small figure in episcopal vestments among the children. Shrouded figures and infants in swaddling clothes also occur.

Crosses, Canopies, Inscriptions, &c. There are a few crosses of this century of a different kind to those previously described. These are plain ones, not floriated in the head, but having the

arms terminated by fleurs-de-lis, or the Evangelistic symbols: examples occur at Higham Ferrers, Northampts, 1400; Cassington, Oxfordshire, c. 1420; Broadwater, Sussex, 1446. There are also several fine floriated crosses, as at Newton, Northampts, 1400; Stone, Kent, 1408; Hildersham, Cambridgeshire, 1408; Grainthorpe, Lincolnshire, c. 1480.

The canopies of about the date of 1420 are readily distinguished by a peculiarity which is observable to the same extent at no other period. The spandrils formed by the cusps and centre-pieces are generally filled with small tracery and minute foliage of three or four leaves; the centre-pieces are often of a very rich pattern. Good examples occur at Gunby and Linwood, Lincolnshire; Trotton, Sussex; Great Shelford, Cambridgeshire, &c. A very beautiful canopy of the date of 1432 remains at Warbleton, Sussex. Canopies of all sizes are now very common; they are single, double, triple, and even quadruple, as at Thornton, Bucks. *Groining* is of frequent occurrence in them; there is a fine example at Castle Donington, Leicestershire. At the close of the century, a gradual debasement may be observed in this as well as in the other parts of Brasses; there is more attempt to produce an effect of *perspective*, and the crockets and other details have less beauty in design.

The inscriptions at the commencement of this century are frequently in hexameter verse, and very long; but without any merit of composition. There are some sentences, applicable to all classes, which are very often met with. Such are the passage from Job, "Credo quod Redemptor, &c. and the following, "Es testis, Christe, quod non jacet hic lapis iste Corpus ut ornetur, sed spiritus ut memoretur." "Quisquis eris, qui transieris, sta, perlege, plora; Sum quod eris, fueramque quod es, pro me, precor, ora." Latin and English are the languages used; those in the former usually beginning "Hic jacet," &c. or "Orate pro animâ," &c. and ending with "cujus animâ propicietur Deus." The letters at the end of the century are generally less bold than those of earlier times, and the capitals are no longer of the Lombardic form. The Evangelistic symbols at the angles of marginal legends are common throughout the century.* Small scrolls are occasionally seen scattered over the whole slab, with such legends as

* [The object of these seems to have been a tutelary invocation, as we may infer from the following child's prayer, still very commonly in use among the less educated village poor:

"Matthew, Mark, Luke, and John,
Bless the bed that I lay on;
Four corners to my bed,
Four angels round my head,
God within and God without,
Blessed Jesus all about."—Ed.]

Jhū mcy, &c. ; the most perfect example of this is at Wiston, Sussex.

SIXTEENTH CENTURY.

Ecclesiastical. There is no great peculiarity which distinguishes the ecclesiastical Brasses of the sixteenth century, except the more extensive use of shading, and an increased degree of coarseness in general. There is less taste shewn in the orphreys and apparells ; the chasuble usually hangs with a sharp point and in thick folds ; the hair is worn straight and long ; and the shoes are very much rounded. There are a few Brasses after the Reformation representing ecclesiastics in their ancient vestments, but they are not common. The most remarkable are those of Bishop Goodrich at Ely, 1553 ; of Bishop Pursglove at Tideswell, Derbyshire, 1579 ; and of Archbishop Harsnett at Chigwell, Essex, 1631. Other Brasses of the clergy of this period represent them in a plain gown or cassock, and sometimes holding a book ; or in their academical dress, as at Battle, Sussex.

Military. There is not much change observable in the armour of Henry VIII's time, from that of the close of the preceding century. A shirt of mail, worn under the tuiles, and divided in front, becomes more conspicuous now ; the hair is worn very long, and every part of the armour shaded.

A fine example occurs at Wivenhoe, Essex, 1507. Towards the close of this century, and afterwards, the armour frequently extends no farther than the hips; the legs being covered with hose, often puffed out and ribbed. The *morion* now came into extensive use, but it is not often seen in monuments. Good examples of the armour of the 17th century occur at East Sutton, Kent; Middleton Lancashire; S. Sepulchre, Northampton, &c.

Civil. The civil costume of the first half of this century is not more remarkable for variety than the military. The female dress continued much the same as before: a fine example occurs in the brass of the Countess of Oxford, at Wivenhoe, Essex, 1537. After the Reformation we find the costume which is familiar to us in the portraits of Elizabeth and of Mary Queen of Scots. The gown consists of a long stomacher, extending into the *vardingale* or hoop, with sleeves puffed out at the shoulders; a ruff is worn round the neck, and a bonnet or a high-crowned hat on the head. In the male costume we see a doublet and trunk hose, covered with a mantle and standing collar, as well as a ruff and hat. This dress, with many variations, continued during the next century. The Brasses of this period are so uninteresting from the coarseness of their design, that it will not be necessary to describe the minute changes observable in them. Some of the latest

Brasses existing, until the present revival of them, are at Cray S. Mary, Kent, 1773. Fine canopies of the sixteenth century remain at Wivenhoe, Essex. *Crosses* remain at Flore, Northampts, and Penshurst, Kent; the latter only thirteen inches long. Modern Brasses of great excellence have been put down by the Messrs. Waller at Windlesham, Surrey; Michel Dean, Gloucestershire; Gresford, Denbighshire; Fen-Drayton, Cambridgeshire, &c.

Palimpsest Brasses are those in which the same plate has been used over again, either on the same side as the original design, as at Waterpery, Oxfordshire, or on the reverse; cases of the latter kind are not very uncommon; a curious one occurs at Burwell, Cambridgeshire.

The first impressions of Brasses were taken by Craven Ord, Sir John Cullum, and the Rev. Thomas Cole, about the year 1780. These were effected by using damped paper and printing ink; a process which affords a very distinct impression of the Brass, but is too dirty and tedious for general use. There are several methods now in use, of which the best appears to be with heel-ball, or *pouch*-ball, manufactured by Ullathorne, Gate St., Lincoln's Inn Fields, Large cakes are the most convenient for use; and the softer kind for deeply cut Brasses, and the harder kind for hot weather and for fine work. The best paper

for this method is the *lining-paper* used by paper-hangers, the whitest that can be procured, and not too thin. Three sizes of this paper may be had at Jones's, Leadenhall Street, or Trollope's, Parliament Street. The widest yet manufactured is that sold by Limbird, 143, Strand, which is four feet seven inches wide. Another method now frequently used is with black paper and the metallic rubber, invented by Mr. Richardson of Greenwich, by which a fac-simile of the Brass in colour is obtained; but the contrast produced by the old plan is much greater than in this, which is not therefore recommended to those who wish to study costume by Brasses. For the purpose of an *engraving*, the clearest impressions may be taken by a mixture of the finest black lead with linseed oil; these should be executed with a rubber of wash-leather, on very thin paper; double double crown tissue paper is the best. Rubbings may also be taken with pieces of black leather on thin paper.

A list of the Monumental Brasses remaining in England, which has just been published, will be found of use to tourists.

THE END.

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